
MEMORANDUM

To: Mayor and City Council

From: Brent Walker, Parks and Recreation Director

Date: March 14, 2016

Subject: **Brook Run Theater Discussion**

ITEM DESCRIPTION

Discussion of Brook Run Theater

BACKGROUND

The Brook Run Conservancy has recently completed its feasibility study of the Brook Run Theater and has requested that the City of Dunwoody consider partnering with them to renovate the facility. Based on the conversation from the City Council Meeting in February, Staff was directed to investigate the cost of demolishing the facility so that Council could further discuss the issue and give further direction as to what the future of the theater will be.

Staff reached out to GeoHydro Inc. to provide an updated asbestos report of the theater (attached) and has provided that report to Complete Demolition Services Inc. for a probable cost estimate for demolition of the facility. Complete Demolition Services estimates that the cost to demolish the theater would be \$357,200, This includes an allowance of \$125,000 if additional asbestos is found in the foundation, similar to what was found in the other park buildings. At this time these funds are not allocated in the 2016 budget but could be through a budget amendment if Council chooses this option.

REQUEST

Staff respectfully requests that Council provide additional guidance on the future of the Brook Run Theater.



Addendum Report of Comprehensive Asbestos Survey

Theatre Building

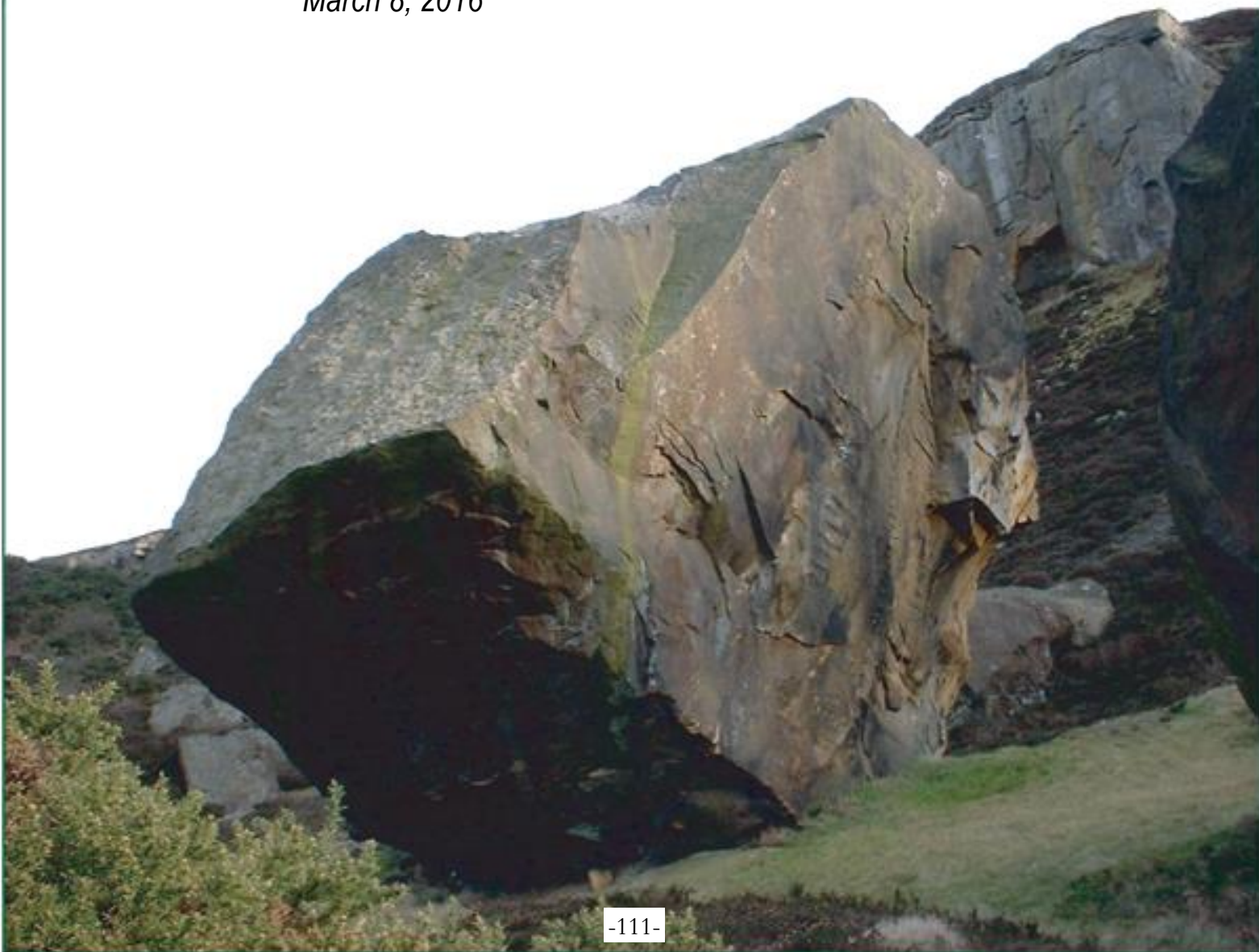
Brook Run Park

Dunwoody, DeKalb County, Georgia

Geo-Hydro Project Number 150114.30

Dunwoody Public Works

March 8, 2016



Mr. Brent Walker
Dunwoody Public Works
41 Perimeter Center East
Suite 250
Dunwoody, Georgia 30346

March 8, 2016

**Addendum Report of
Pre-Demolition Environmental Assessment
Theatre Building
Brook Run Park
Dunwoody, DeKalb County, Georgia
Geo-Hydro Project Number 150114.0**

Dear Mr. Walker:

Geo-Hydro Engineers, Inc. (Geo-Hydro) has completed the Addendum Pre-Demolition Asbestos Survey for Brook Run Park's theater building. Brook Run Park is located at Georgia Way South in Dunwoody, DeKalb County, Georgia. The purpose of the addendum pre-demolition surveys is to identify and quantify regulated asbestos containing building materials (ACMs) that require special handling during demolition that were not identified in Geo-Hydro's previous report dated January 23, 2014, Geo-Hydro project No. 130572.00.

Our work was done in general accordance with our proposal 16291 dated October 14, 2013. This report and our observations are intended solely for the benefit of Dunwoody Public Works and may not be used or relied upon by any other party without Geo-Hydro's prior written consent.

SITE DESCRIPTION

The subject property consists of a theater building located on the Brook Run Park property located at Georgia Way South in Dunwoody, DeKalb County, Georgia. The approximate site location is shown on Figure 1 in the Appendix. Details of the theater building are listed below:

- The theatre building is an unoccupied concrete, block and brick structure with a basement and with a shingle/paper roof system. The exterior walls are brick. The attic space was observed to be un-insulated. The building's ceilings were suspended 12-inch square ceiling tiles, 24-inch square ceiling tiles, and spray-on and troweled-on ceilings. The interior walls were brick, concrete block, and concrete block covered by a plaster skim coat. The concrete floor on the main level was covered by 12-inch, carpet, and the concrete floor in the basement was uncovered concrete. The observed plumbing systems were un-insulated or insulated with fiberglass.

PROCEDURES

Suspect Asbestos and Lead-Based Paint Sampling

Mr. Jarrett Baggett a certified Asbestos-In-Buildings Inspector (Toxic Substances Control Act (TSCA) Title II) performed a limited asbestos screen for the theatre building on February 29, 2016. The asbestos screen was performed in general accordance with **ASTM E2356-10** *Standard Practice for Comprehensive Building Asbestos Surveys*. Mr. Baggett expended reasonable time and effort to identify and sample as many homogeneous areas of suspect ACMs that were not identified in Geo-Hydro's January 23, 2014, Pre-Demolition Environmental Assessment Report. Visually identified suspect materials were sampled to represent conditions of accessible building space.

Due to the hidden nature of many building components it may be impossible to determine if all of the suspected building materials have been located and tested. Destructive testing in some cases is not a viable option. Therefore, we cannot guarantee that all suspect ACMs have been located and sampled. For the same reasons, estimates of ACM quantities and current physical conditions are subject to observations made during the site visit. In the event that suspect ACMs are discovered, please contact Geo-Hydro to examine and possibly collect additional building material samples.

A total of 11 samples of suspect ACMs were collected and analyzed for asbestos. The suspect asbestos samples were submitted to Analytical Environmental Services, Inc. (AES) in Atlanta, Georgia. AES is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) and the American Industrial Hygiene Association (AIHA) for bulk asbestos fiber analysis. The samples were analyzed for asbestos content using polarized light microscopy (PLM) and dispersion staining (EPA Method 600/R-93/116).

FINDINGS

Asbestos Containing Building Materials

The ACM samples and corresponding percent (%) of asbestos detected are noted below. The quantities of ACM noted are provided for informational purposes only, and are not to be used for asbestos abatement cost estimates. **Asbestos contractors are expected to calculate their own ACM quantities for cost estimating and regulatory notification purposes.**

Theatre Building:

Transite Ceiling Tiles: Laboratory analysis detected 20% chrysotile asbestos in samples T-02 and T-04, of the grey, perforated transite ceiling tiles located on the entrance and window overhangs around the outside of the theatre building. The transite ceiling tiles are a Category I non-friable ACM as long as the transite ceiling tiles are removed using methods that will not cause the transite ceiling tiles to become friable. Approximately 400 square feet of transite ceiling tiles were observed on the entrance and window overhangs around the outside of the theatre building

White (12-Inch Square) Ceiling Tile: Laboratory analysis detected 3% amosite asbestos in samples T-07 and T-08 of the white, 12-inch square ceiling tile. The white, 12-inch square ceiling tile are a Category I non-friable ACM as long as the white, 12-inch square ceiling tile are removed using methods that will not cause the white, 12-inch square ceiling tile to become friable. Approximately 2,700 square feet of white, 12-inch square ceiling tile was observed in the chapel room and gym room of the theatre building.

Glue Under Carpet: Laboratory analysis detected 2% chrysotile asbestos in samples T-10 and T-11 and of the glue under the carpet located auditorium and the chapel room of the theatre building. The glue system is a Regulated Asbestos Containing Material (RACM). Approximately 8,000 square feet of carpet with this glue underneath was observed in the auditorium and chapel room.

Theatre Building – Previously Identified in Geo-Hydro's January 23, 2014, Report:

Mastic Under Black and White (12-Inch Square) Floor Tile: Laboratory analysis detected 5%, 3%, 2%, and 2% chrysotile asbestos in samples TS-01 through TS-04, respectively, of the black and white, 12-inch square floor tile mastic. The floor tile system is a Category I non-friable ACM as long as the floor tile system is removed using methods that will not cause the floor tile system to be friable. Approximately 1,300 square feet of black and white, 12-inch square floor tile were observed in the front lobby area of the theatre building.

White (24-Inch Square) Ceiling Tile: Laboratory analysis detected 2% amosite asbestos in samples TS-05 and TS-06 of the ceiling tile. The ceiling tile system is a Category I non-friable ACM as long as the ceiling tile system is removed using methods that will not cause the ceiling tile system to be friable. Approximately 5,000 square feet of 24-inch square ceiling tile were observed throughout the main floor of the theatre building. An additional 2,700 square feet of 12-inch square ceiling tile were observed in the chapel room and gym room of the theatre building. Although a sample of this 12-inch square ceiling tile was not collected, it is the same 12-inch square ceiling tile that was observed in the administrative buildings and found to contain 2% chrysotile asbestos and 2% amosite asbestos. It is the opinion of Geo-Hydro that all 12-inch square ceiling tile in the Theatre Building be treated as an ACM.

Spray on Surfacing Material: Laboratory analysis detected 20% chrysotile asbestos in samples TS-10 and TS-11 and TS-14 through TS-18 of the gray spray on surfacing material located on the structural steel in the basement and on the ceiling of the upstairs projection room of the theatre building. The surfacing material system is a Regulated Asbestos Containing Material (RACM). All of the structural steel in the basement and approximately 650 square feet of ceiling area in the upstairs projection room of the theatre of the theatre building contain the surfacing material. It is likely that additional structural members that are coated with the surfacing material will be uncovered during demolition.

It should be noted, that during demolition activities of previous buildings at Brook Run Park, the buildings' foundations and slabs have had a felt paper and glue, vapor/water proofing layer that is an ACM. Although Geo-Hydro was unable to identify this felt paper and glue, vapor/water proofing layer on the theatre building due to this layer being beneath the land surface, it should be assumed that the foundation and slab system of the theatre building also contains this felt paper and glue, vapor/water proofing system and should be considered for abatement purposes.

CONCLUSIONS AND RECOMMENDATIONS

Prior to renovation or demolition, a licensed asbestos abatement contractor should remove and dispose of the asbestos-containing materials identified by this report. Georgia EPD requires notifications for demolition of ACMs encompassing 10 or more square feet. Additionally, ACMs encompassing at least 10 square feet are regulated by the U.S. Environmental Protection Agency (USEPA) under the National Emission Standards for Hazardous Air Pollutants (NESHAP) and also by the Occupational Safety and Health Administration (OSHA) under its worker protection regulations. These regulations require special handling and disposal procedures when asbestos containing materials are disturbed.

Geo-Hydro Engineers, Inc. has appreciated the opportunity to perform this environmental testing. If you have any questions concerning this report, or if we can be of further assistance, please call us.

Sincerely,

GEO-HYDRO ENGINEERS, INC.



Jarrett Baggett, P.G.
Environmental Services Director
jbaggett@geohydro.com

LJB /150114.30 Brook Run Park Theatre Building ACM Survey Addendum Report.doc

Appendix 1

Figures and Photographs

Appendix 2

Asbestos Analysis Summary Table

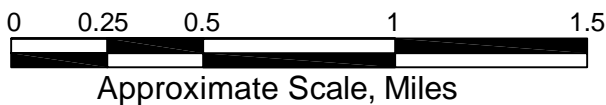
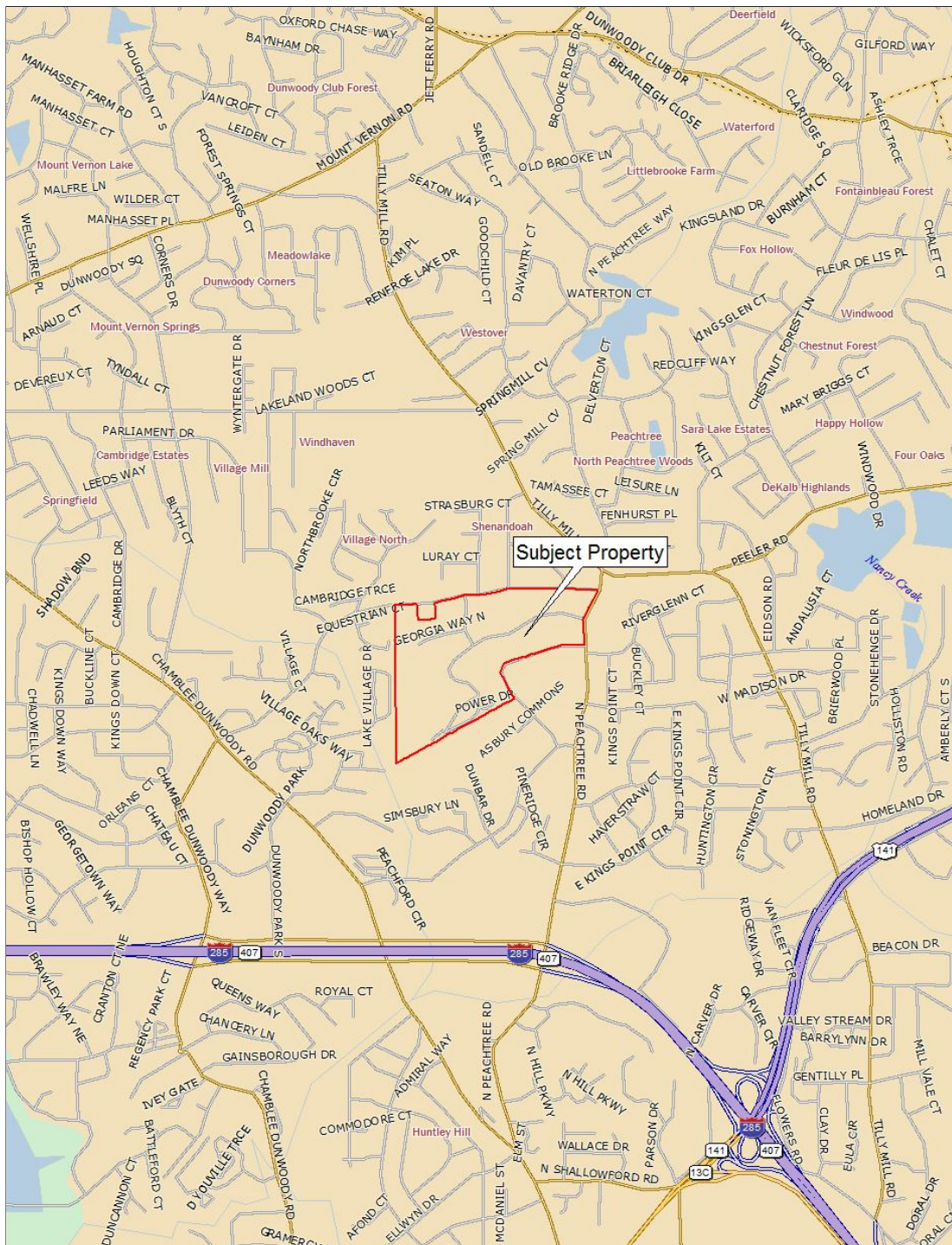


Figure 1: Site Location Plan

Brook Run ASB
Dunwoody, Georgia
Geo-Hydro Project Number 130572.00

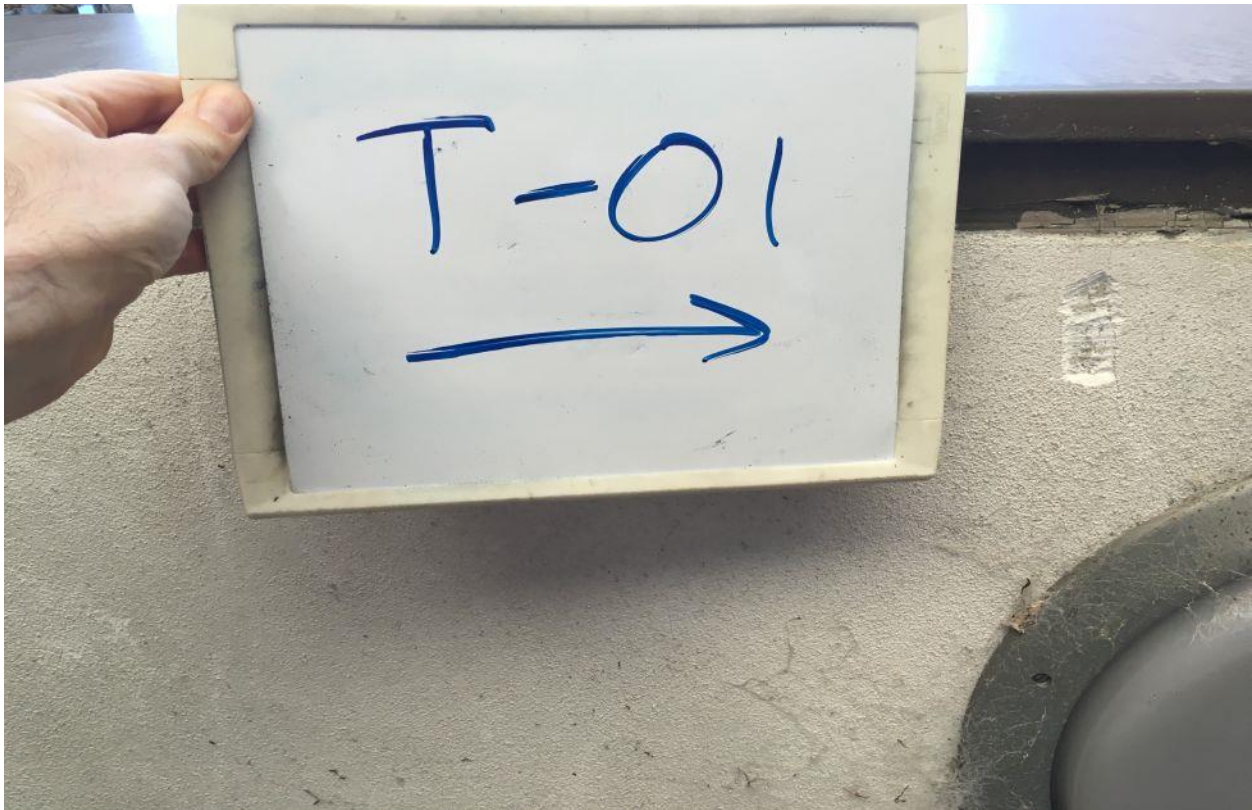


Plate 1: Laboratory analyses did not detect asbestos minerals within the skim coat T-01 sample collected from the north side lobby entrance overhang of the Theatre Building.



Plate 2: Laboratory analyses detected 20% chrysotile asbestos within transite ceiling tile sample T-02 collected from the north side lobby entrance overhang of the Theatre Building.

#13.

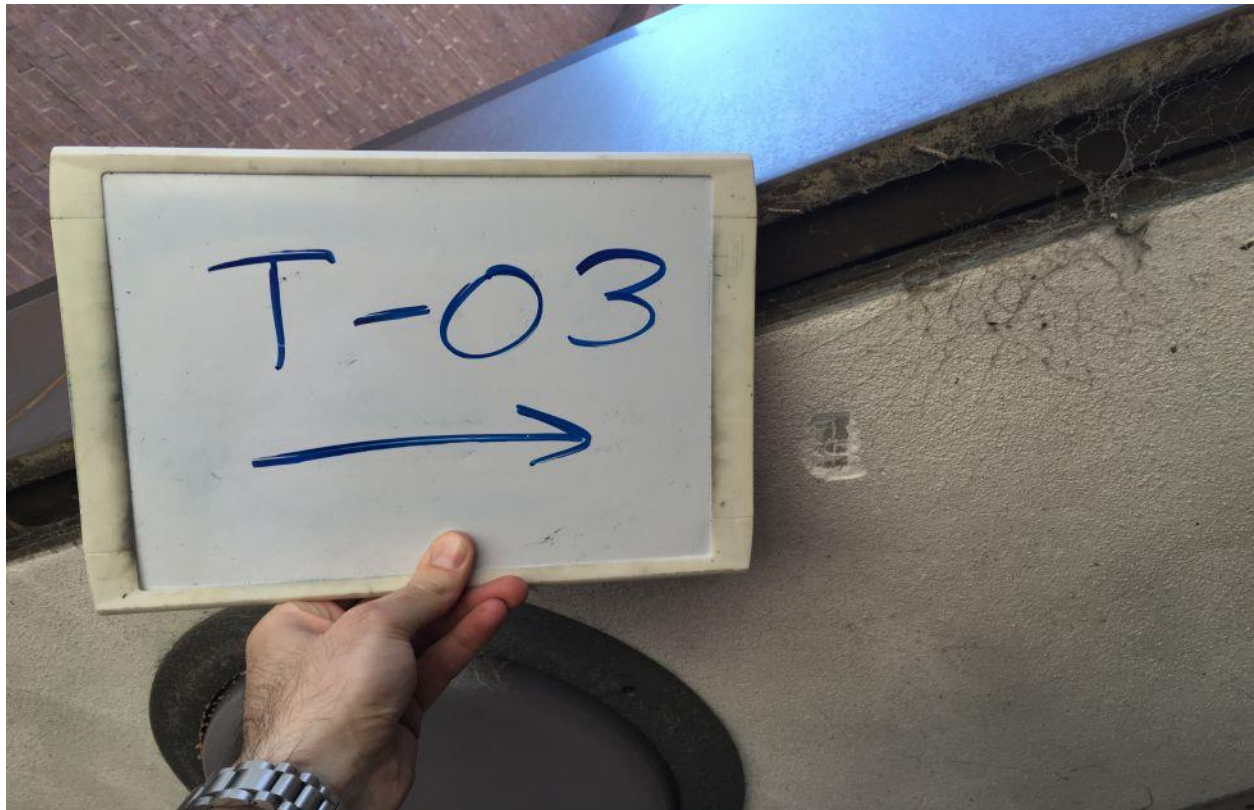


Plate 3: Laboratory analyses did not detect asbestos minerals within the skim coat T-01 sample collected from the south side lobby entrance overhang of the Theatre Building.

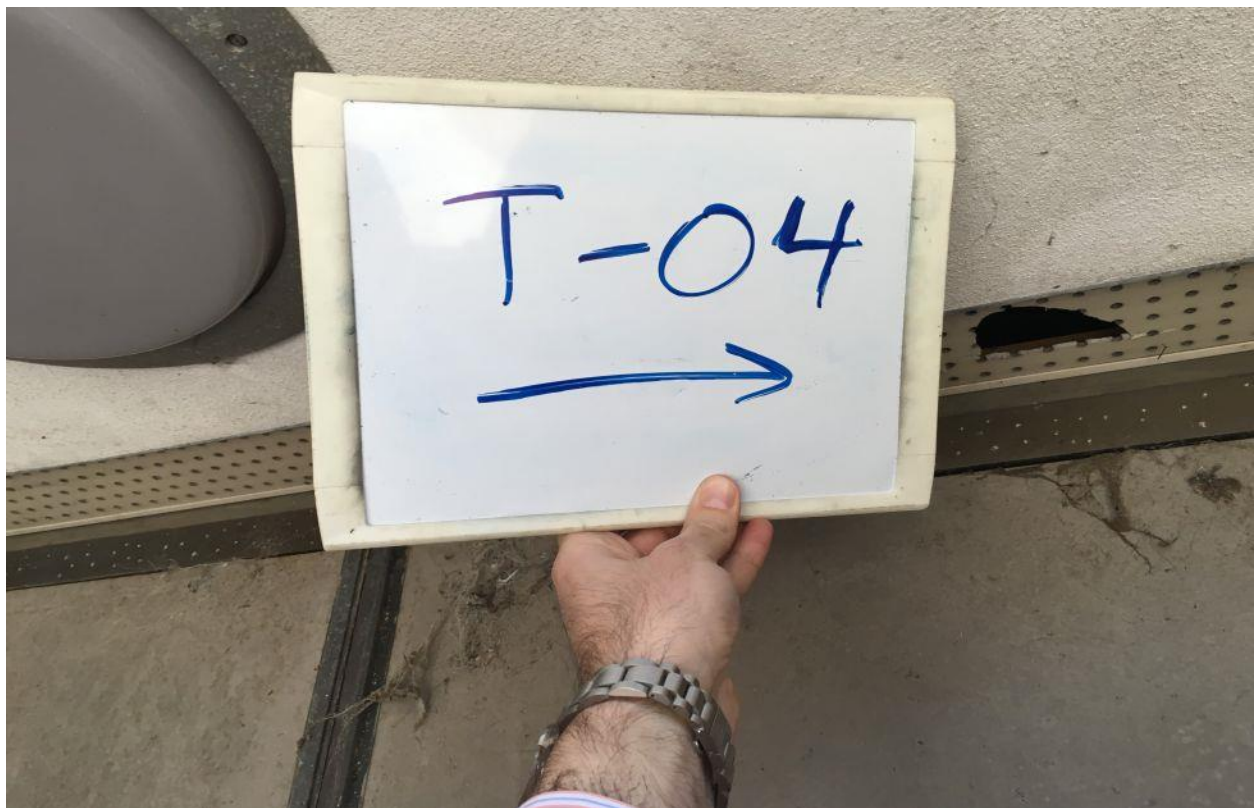


Plate 4: Laboratory analyses detected 20% chrysotile asbestos within transite ceiling tile sample T-02 collected from the south side lobby entrance overhang of the Theatre Building.

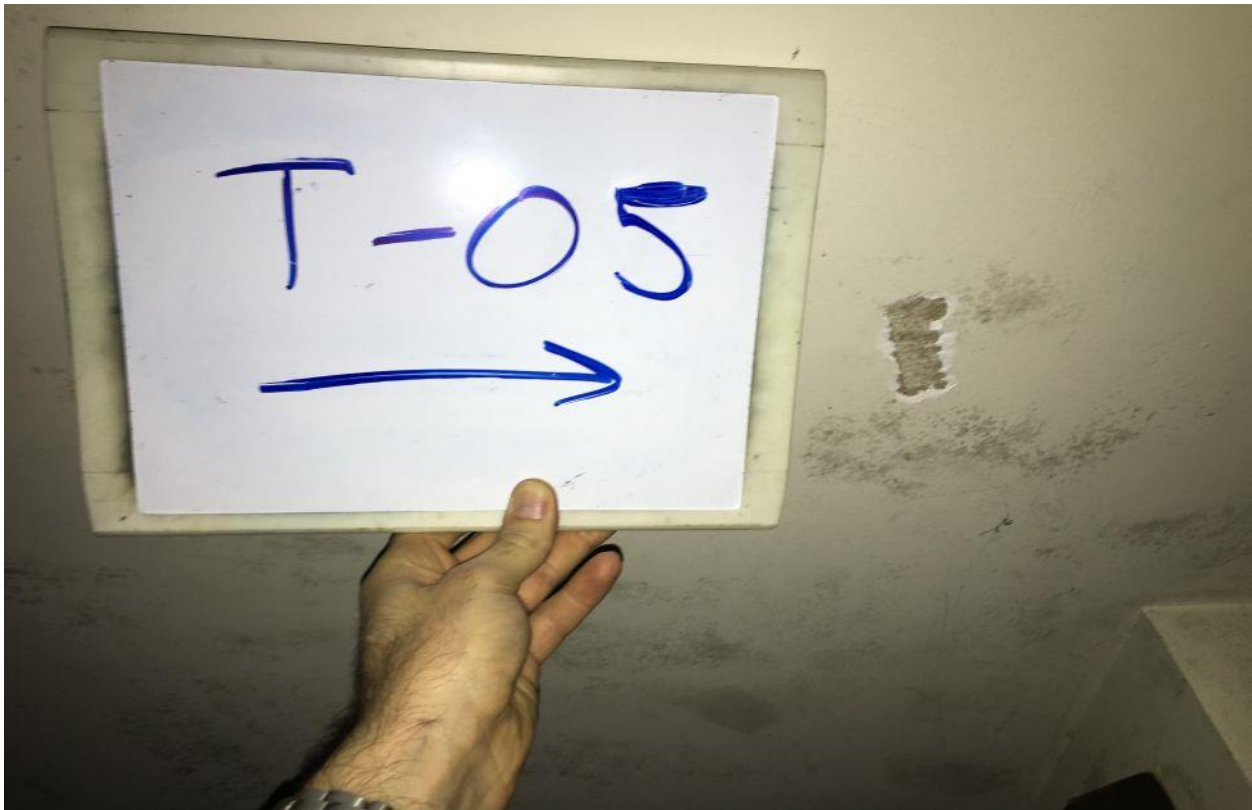


Plate 5: Laboratory analyses did not detect asbestos minerals within the skim coat T-05 sample collected from the auditorium ceiling of the Theatre Building.

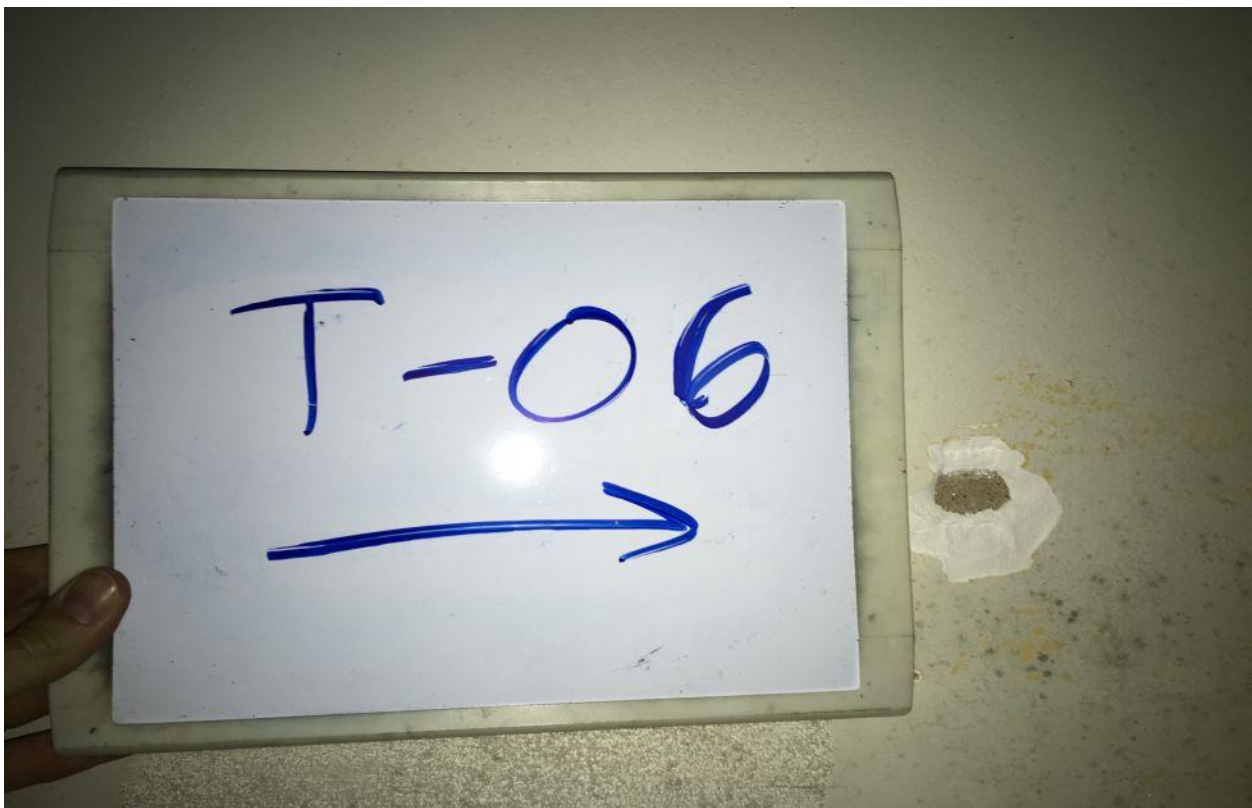


Plate 6: Laboratory analyses did not detect asbestos minerals within the skim coat T-06 sample collected from the auditorium wall of the Theatre Building.

#13.

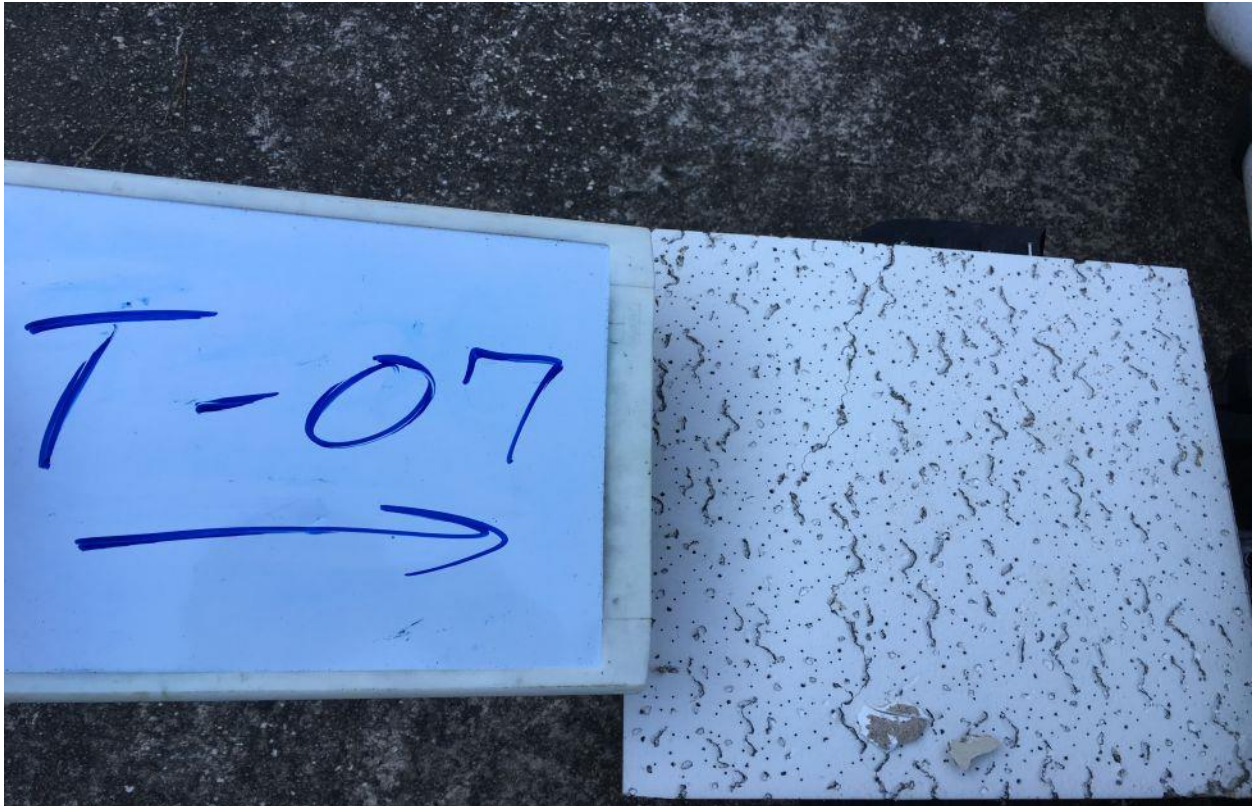


Plate 7: Laboratory analyses detected 3% chrysotile asbestos within 12"x12" ceiling tile sample T-07 collected from the chapel room of the Theatre Building.

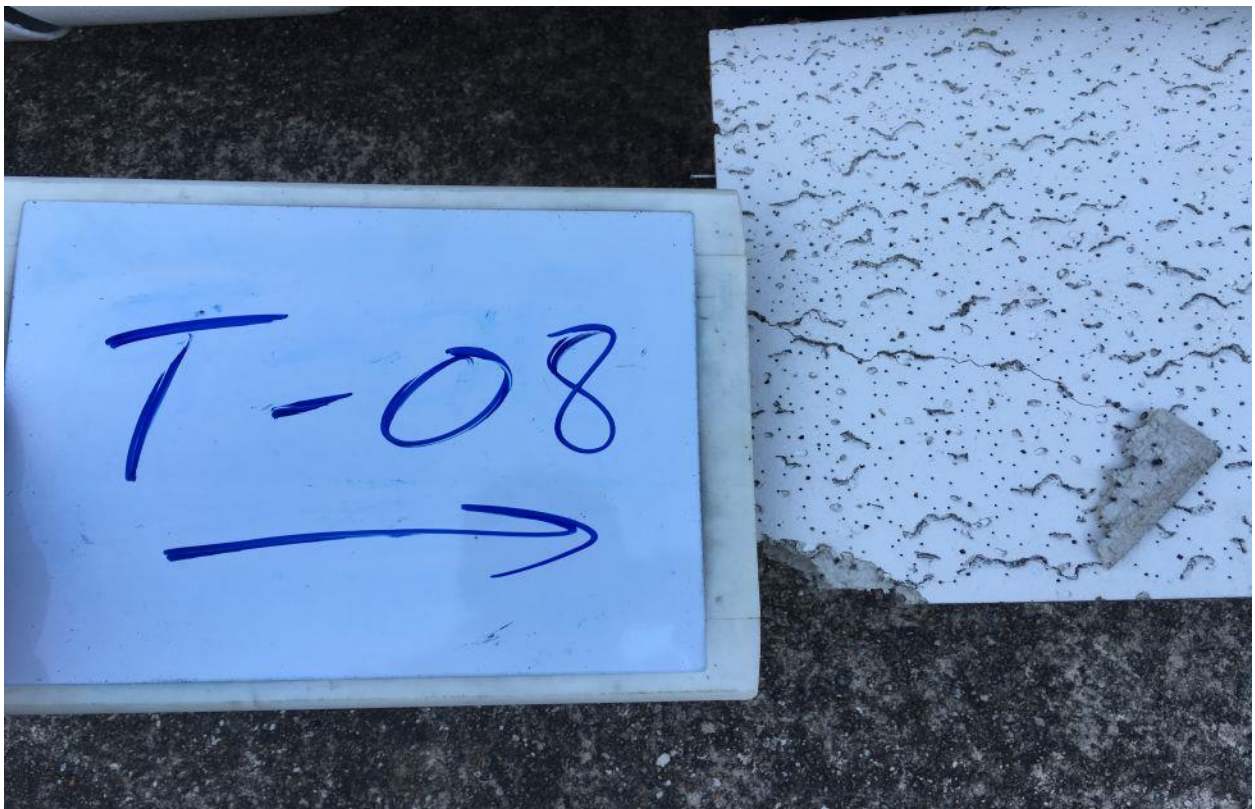


Plate 8: Laboratory analyses detected 3% chrysotile asbestos within 12"x12" ceiling tile sample T-08 collected from the gym room of the Theatre Building.

Plate 9: (Photo was not taken): Laboratory analyses did not detect asbestos minerals within the skim coat T-09 sample collected from the west hallway of the Theatre Building.

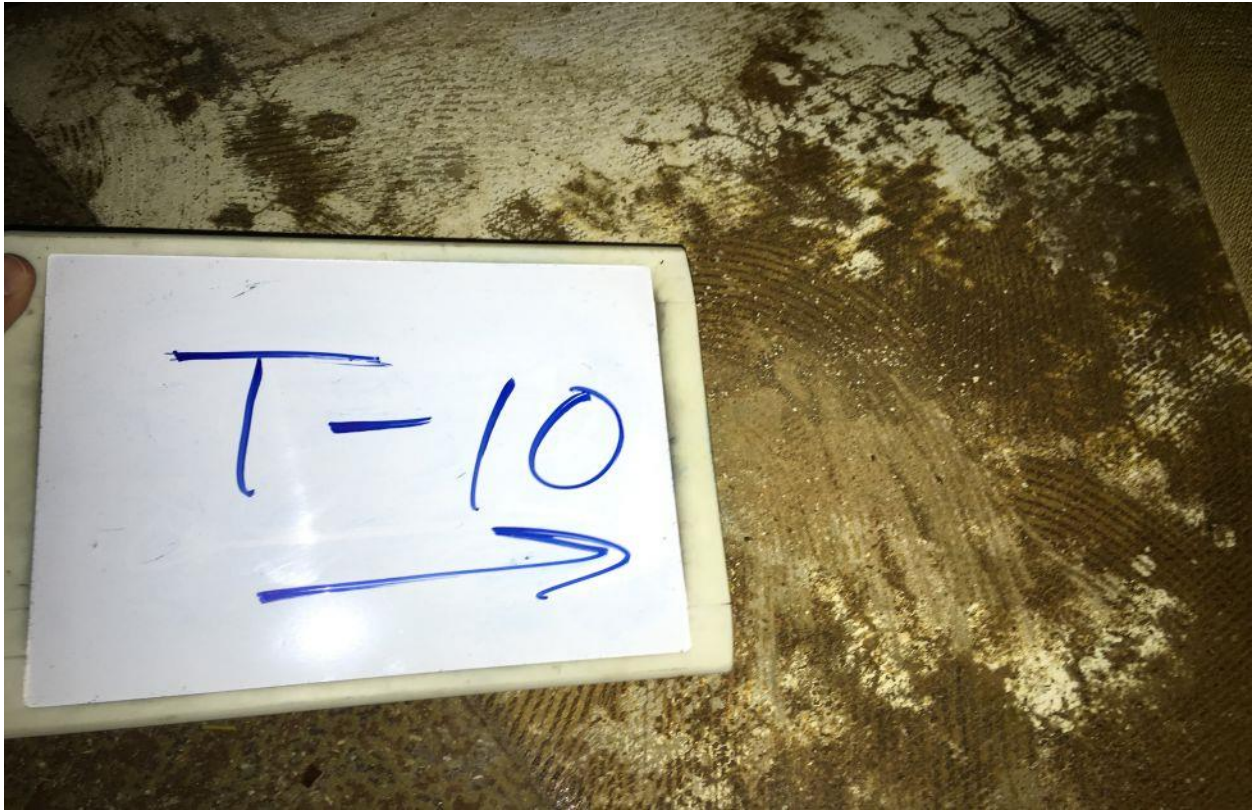


Plate 10: Laboratory analyses detected 2% chrysotile asbestos within the glue T-10 sample collected from the underneath the carpet in the auditorium of the Theatre Building.

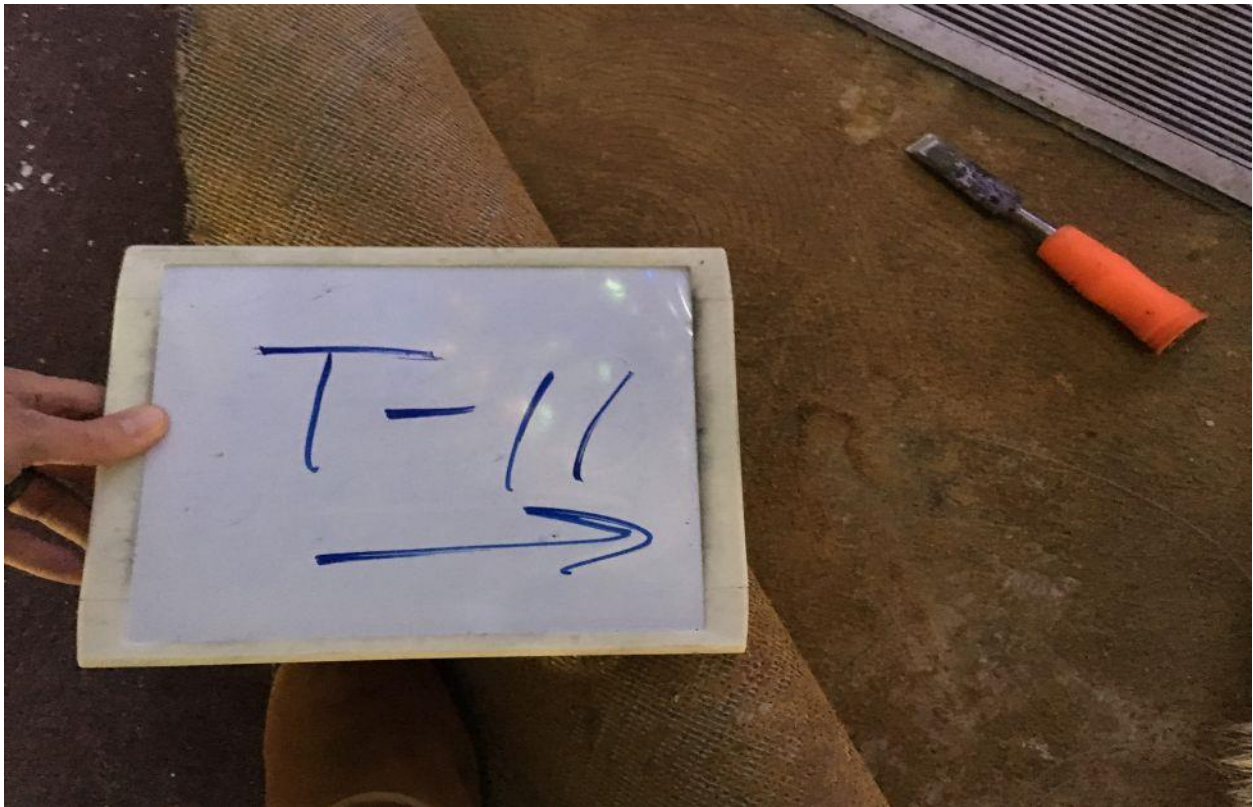


Plate 11: Laboratory analyses detected 2% chrysotile asbestos within the glue T-11 sample collected from the underneath the carpet in the chapel room of the Theatre Building.

December 12, 2013, Survey Photographs



Plate 52: Laboratory analyses did not detect asbestos minerals within the black floor tile from sample TS-01 but did detect 5% chrysotile asbestos in the mastic from sample TS-01 collected from the Theatre Building lobby area.

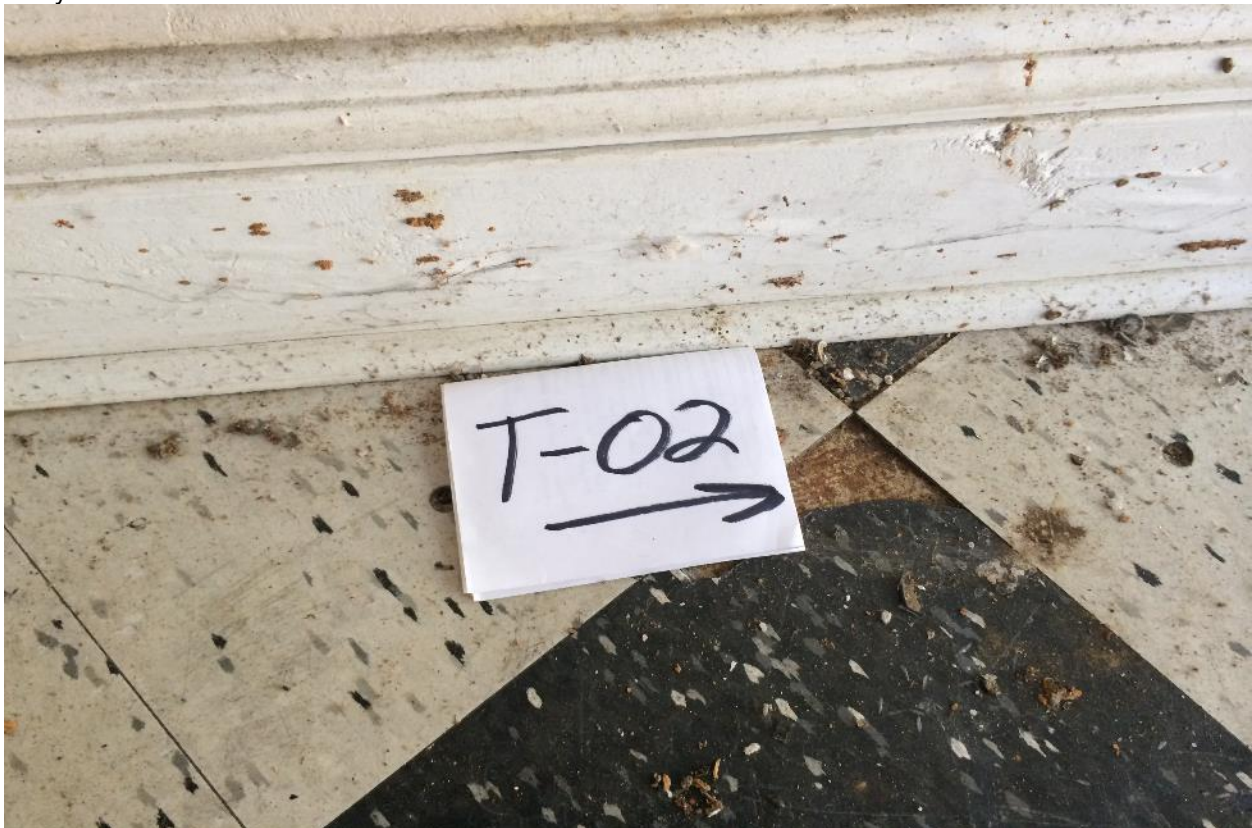


Plate 53: Laboratory analyses did not detect asbestos minerals within the black floor tile from sample TS-02 but did detect 5% chrysotile asbestos in the mastic from sample TS-02 collected from the Theatre Building lobby area.

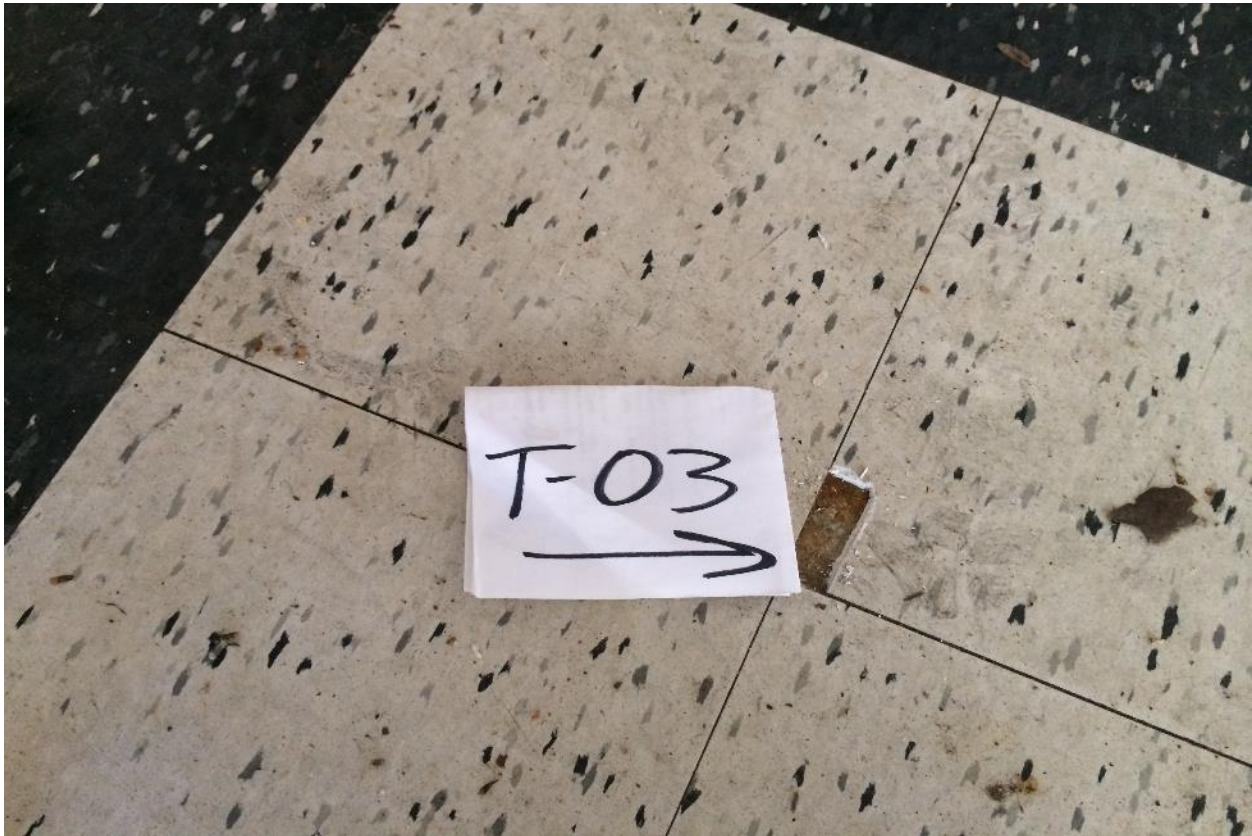


Plate 54: Laboratory analyses did not detect asbestos minerals within the white floor tile from sample TS-03 but did detect 5% chrysotile asbestos in the mastic from sample TS-03 collected from the Theatre Building lobby area.



Plate 55: Laboratory analyses did not detect asbestos minerals within the white floor tile from sample TS-04 but did detect 5% chrysotile asbestos in the mastic from sample TS-04 collected from the Theatre Building lobby area.



Plate 56: Laboratory analyses detected 2% chrysotile asbestos within suspended ceiling tile sample TS-05 collected from the Theatre Building lobby area.

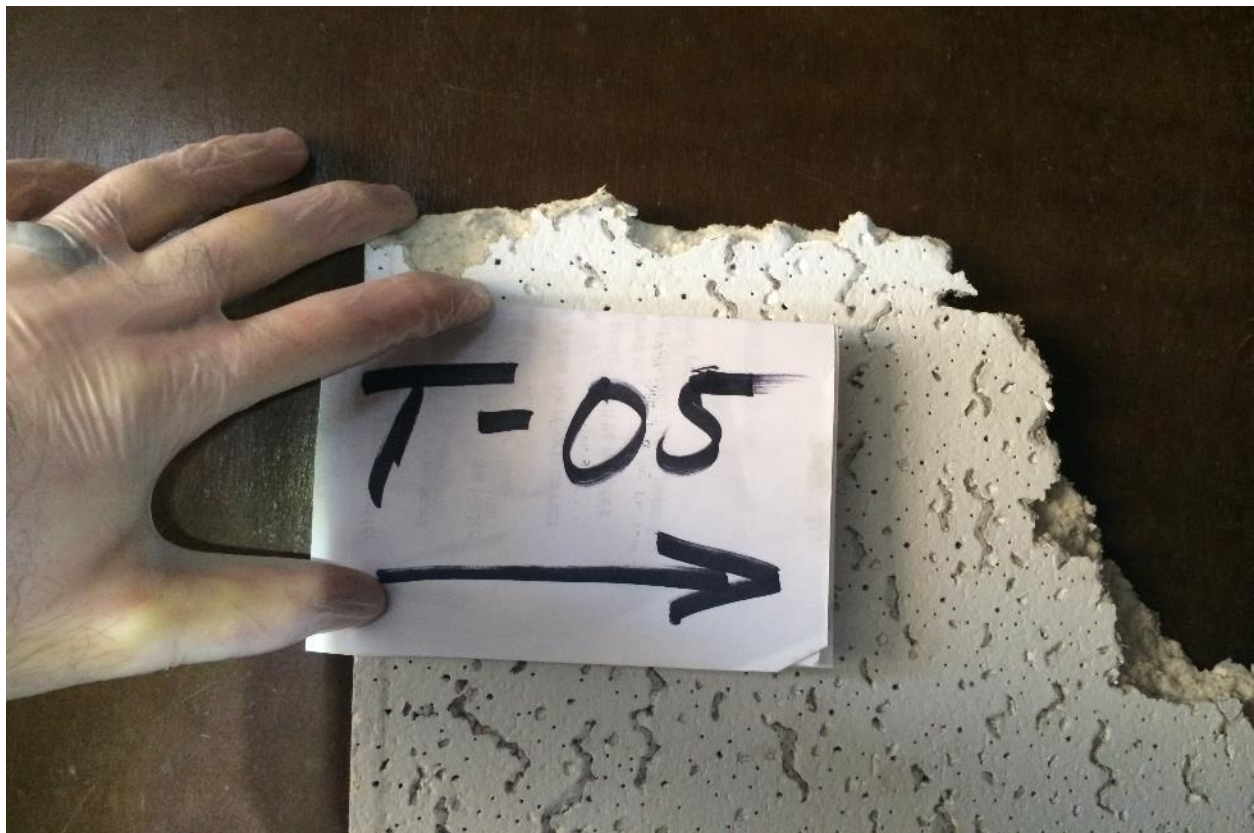


Plate 57: Laboratory analyses detected 2% chrysotile asbestos within suspended ceiling tile sample TS-06 collected from the Theatre Building hallway (sample should be labeled TS-06).

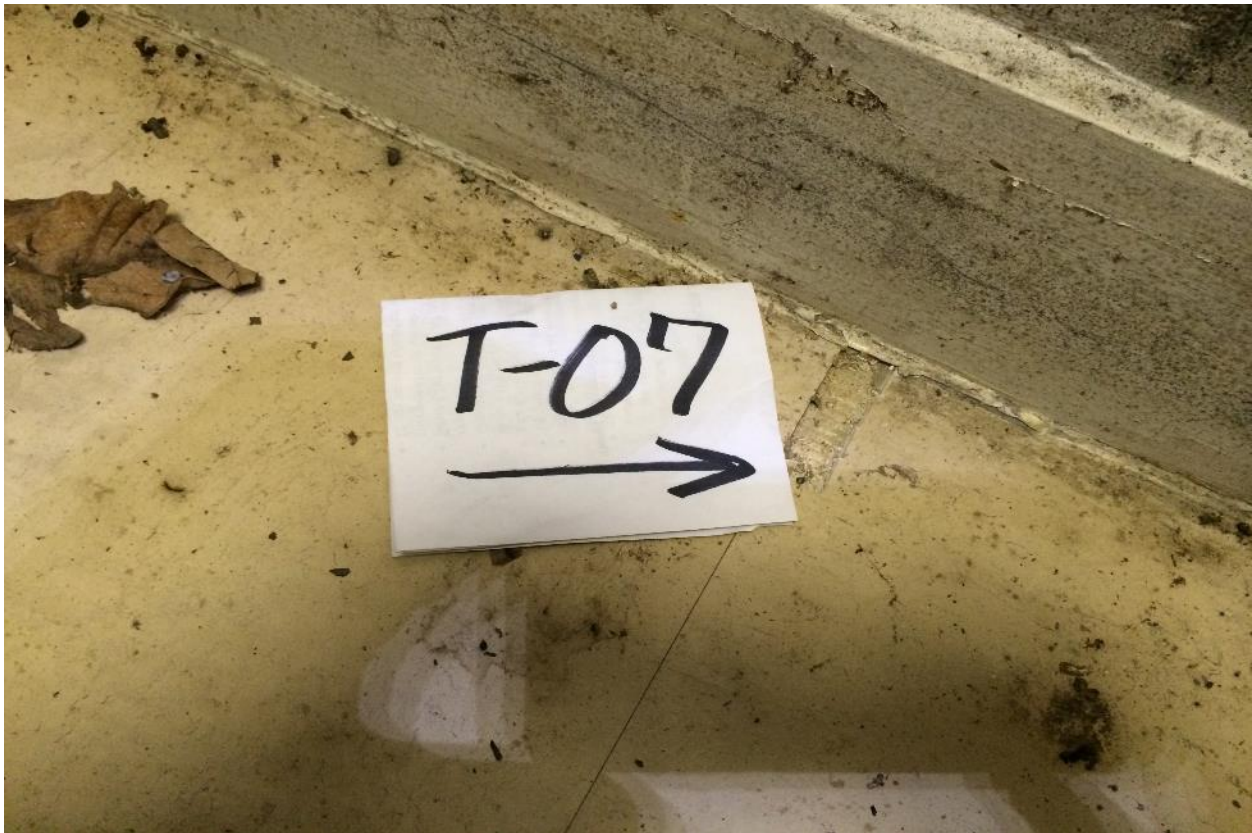


Plate 58: Laboratory analyses did not detect asbestos minerals within the beige floor tile or mastic sample TS-07 collected from the Theatre Building hallway.

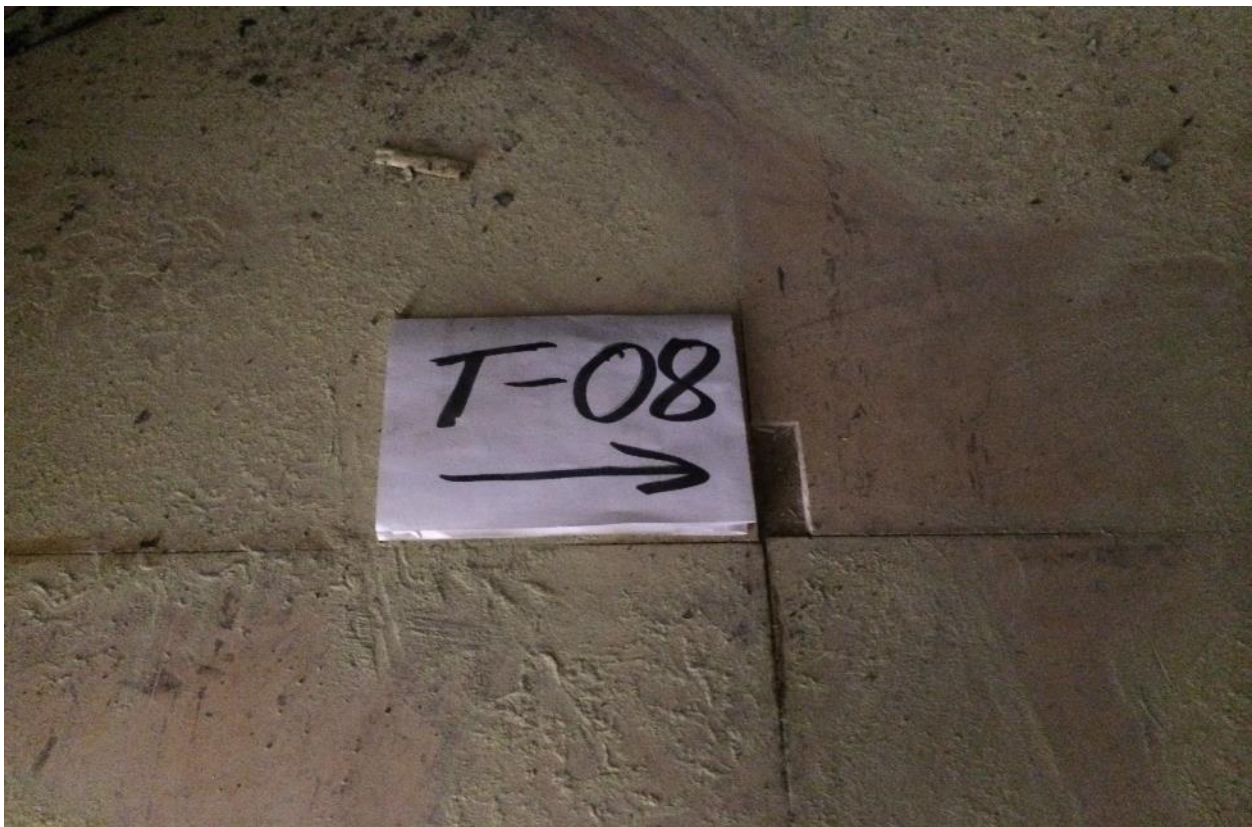


Plate 59: Laboratory analyses did not detect asbestos minerals within the beige floor tile or mastic sample TS-08 collected from the Theatre Building lobby storage room.

#13.



Plate 60: Laboratory analyses did not detect asbestos minerals within plumbing insulation sample TS-09 collected from the Theatre Building lobby ceiling.



Plate 61: Laboratory analyses detected 20% chrysotile asbestos within spray on surfacing material sample TS-10 collected from the Theatre Building upstairs projection room ceiling.

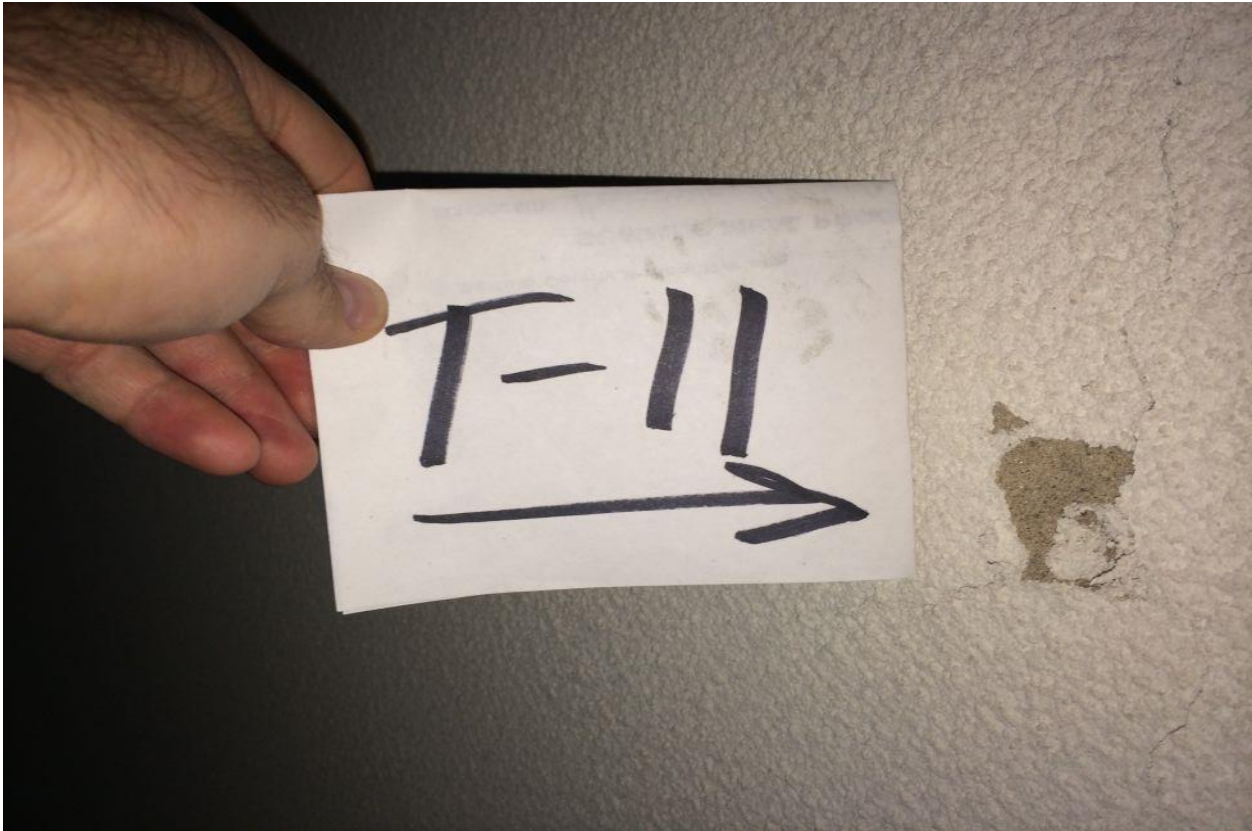


Plate 62: Laboratory analyses detected 20% chrysotile asbestos within spray on surfacing material sample TS-11 collected from the Theatre Building upstairs projection room ceiling.

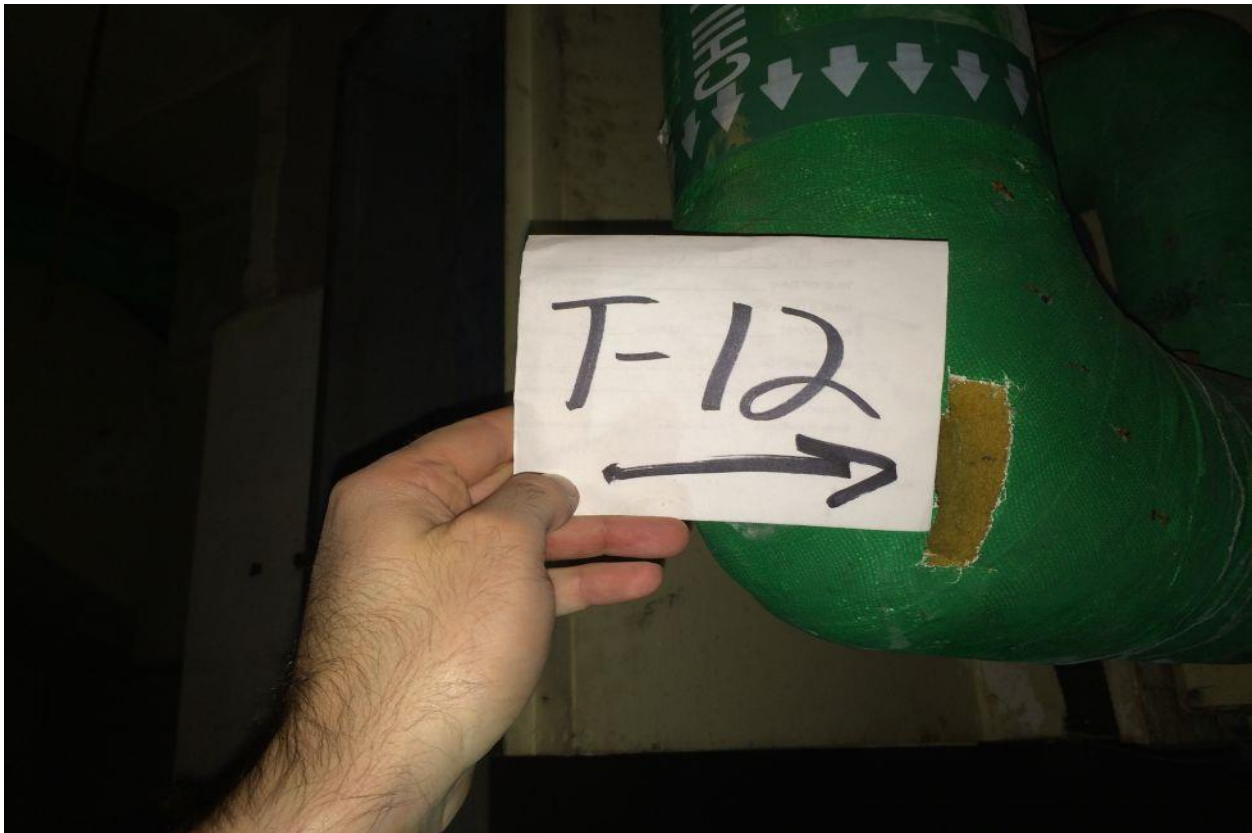


Plate 63: Laboratory analyses did not detect asbestos minerals within plumbing insulation sample TS-12 collected from the Theatre Building basement boiler room.

#13.

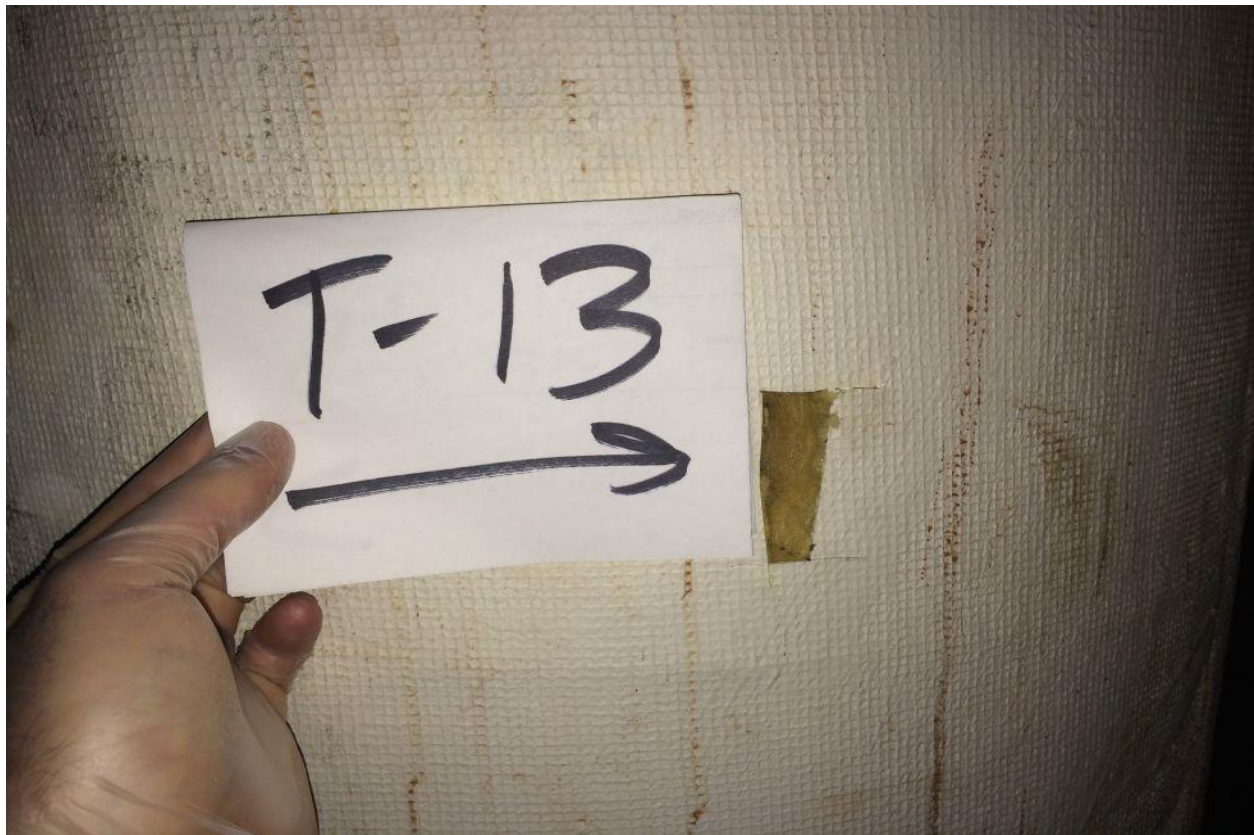


Plate 64: Laboratory analyses did not detect asbestos minerals within boiler wrap insulation sample TS-13 collected from the Theatre Building basement boiler room.

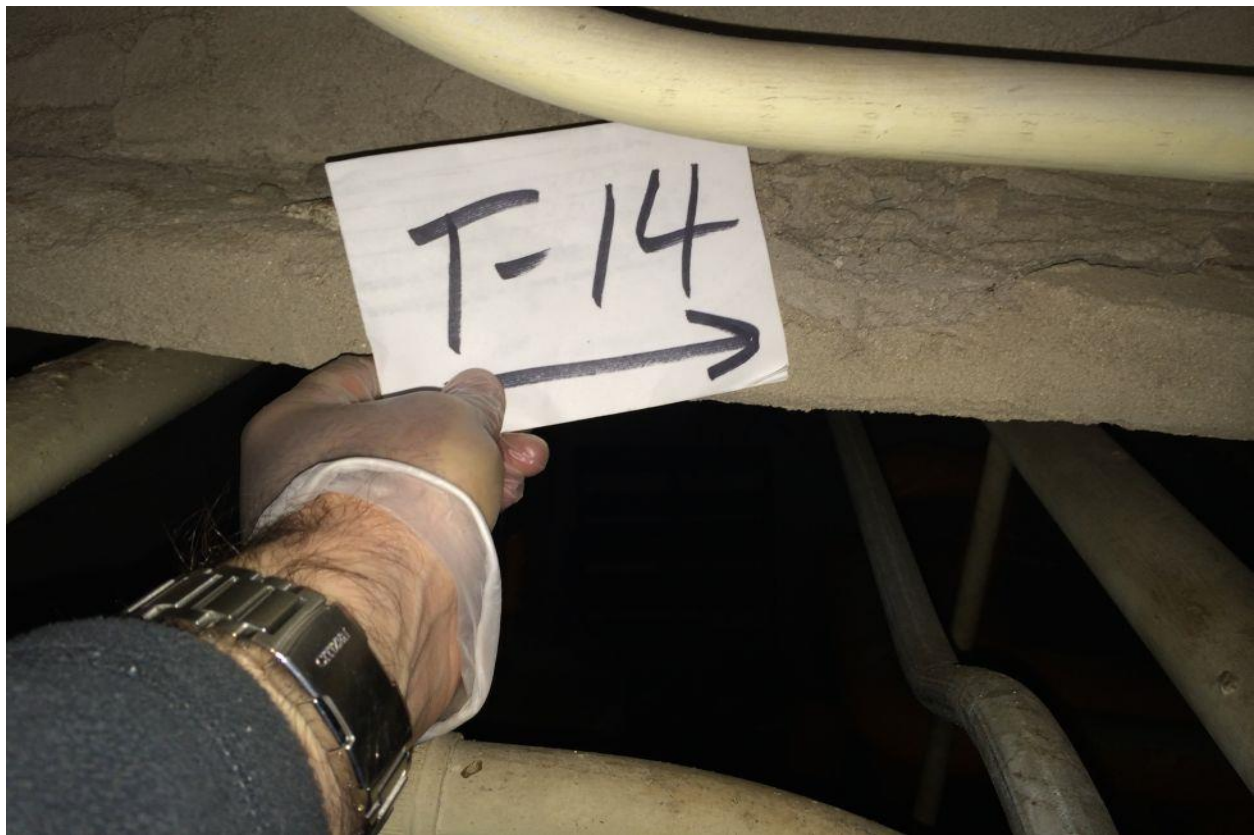


Plate 65: Laboratory analyses detected 20% chrysotile asbestos within spray on surfacing material sample TS-14 collected from the Theatre Building basement structural steel.

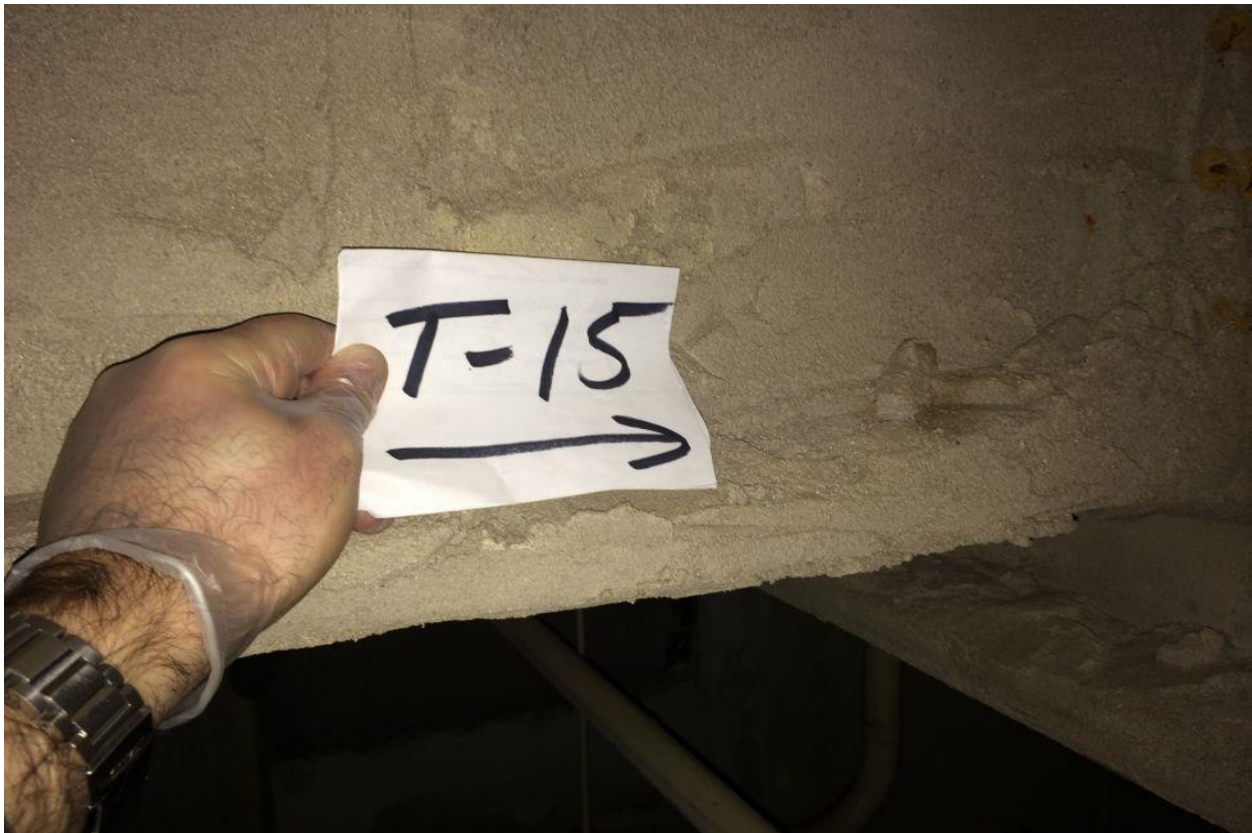


Plate 66: Laboratory analyses detected 20% chrysotile asbestos within spray on surfacing material sample TS-15 collected from the Theatre Building basement structural steel.

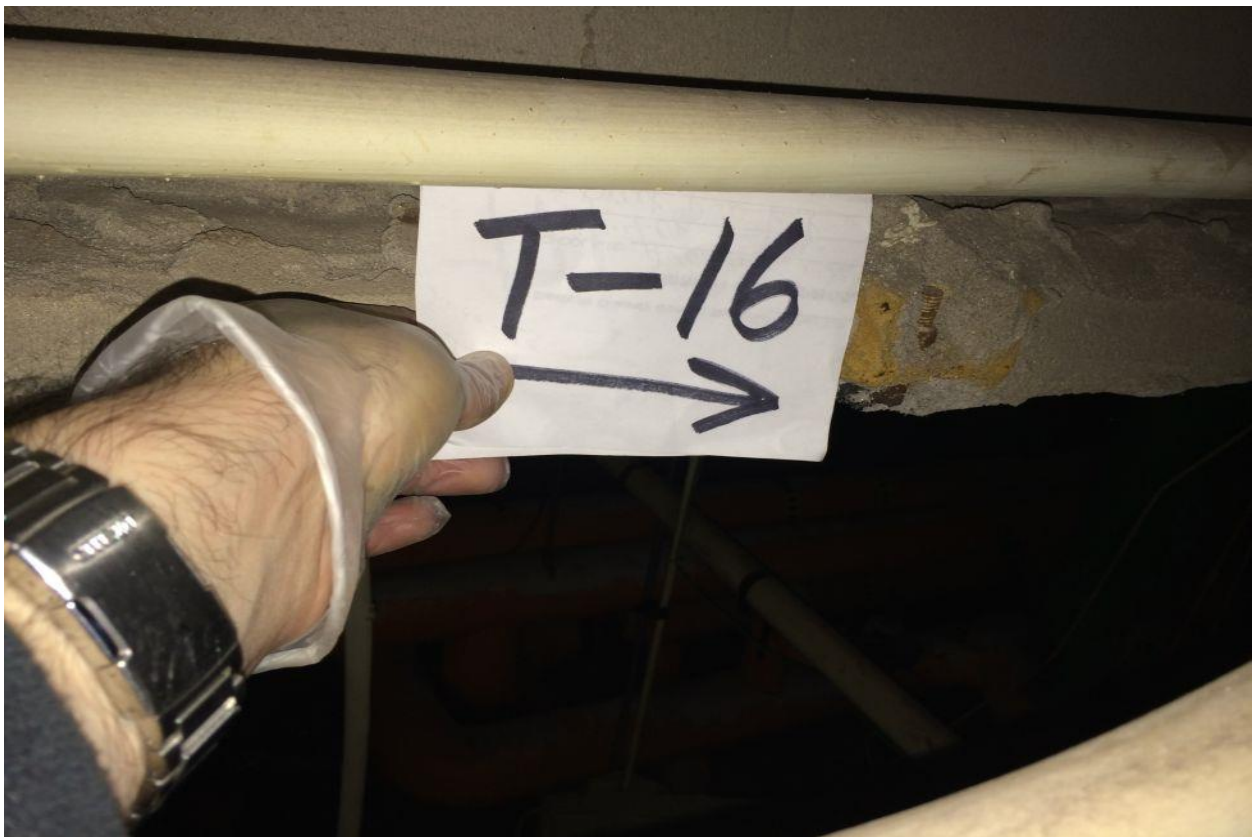


Plate 67: Laboratory analyses detected 20% chrysotile asbestos within spray on surfacing material sample TS-16 collected from the Theatre Building basement structural steel.

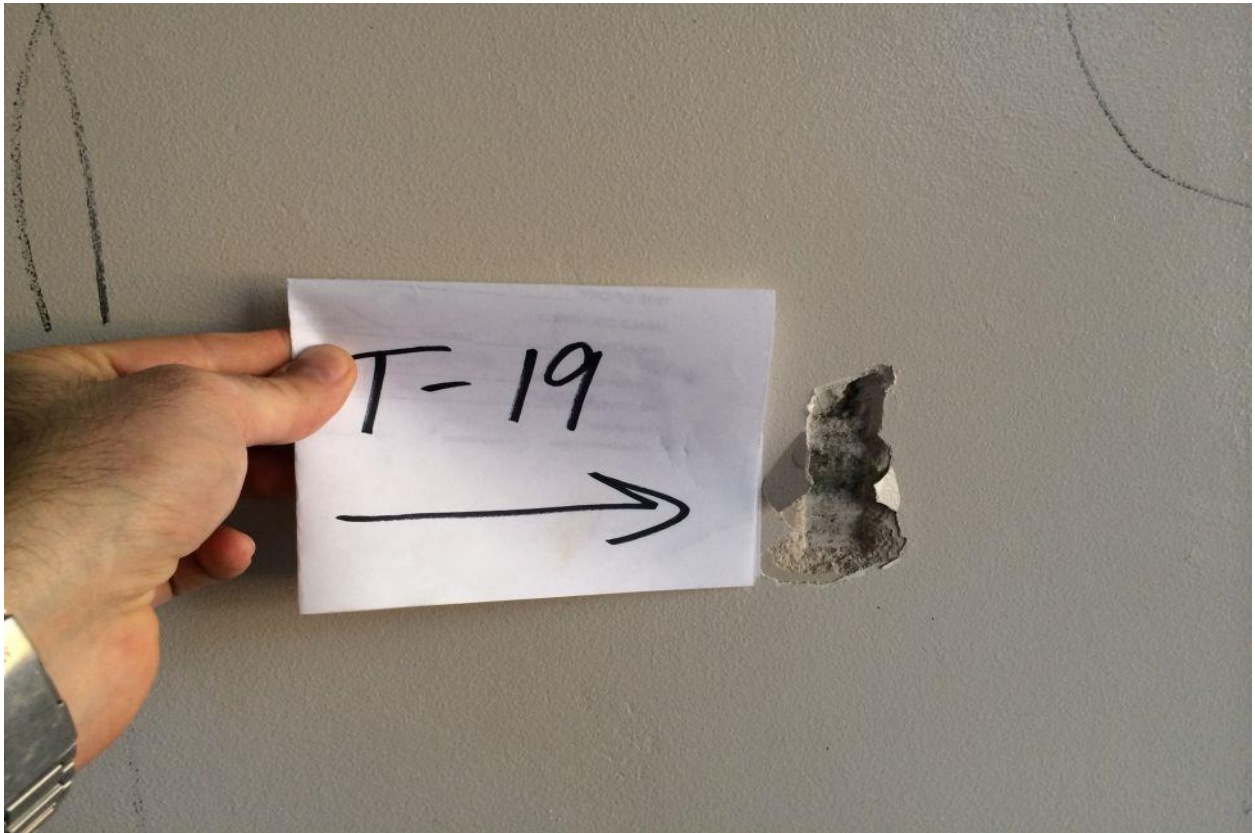


Plate 68: Laboratory analyses did not detect asbestos minerals within troweled on surfacing material sample TS-19 collected from the Theatre Building basement hall wall.

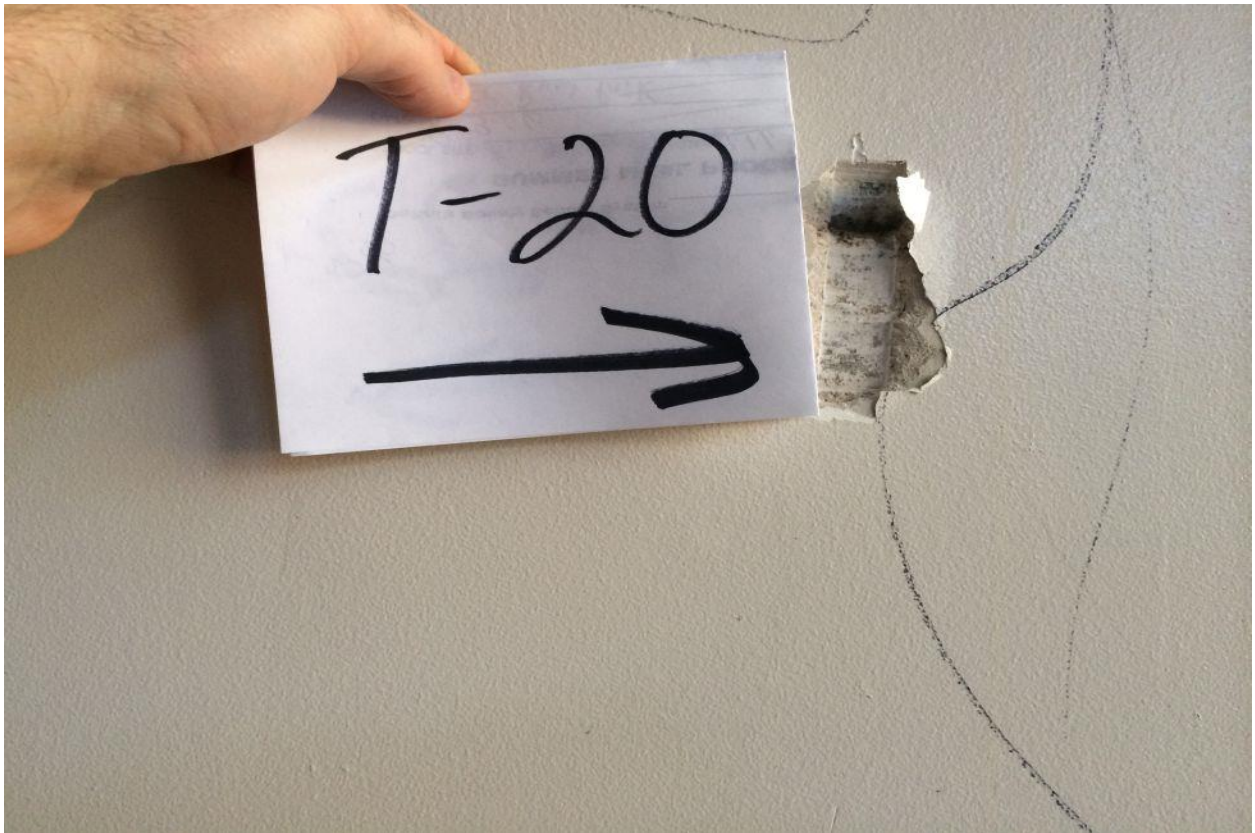


Plate 69: Laboratory analyses did not detect asbestos minerals within troweled on surfacing material sample TS-20 collected from the Theatre Building lobby wall.



Plate 70: Laboratory analyses did not detect asbestos minerals within asphalt roof sample TS-21 collected from the Theatre Building roof.



Plate 71: Laboratory analyses did not detect asbestos minerals within asphalt roof sample TS-22 collected from the Theatre Building roof.

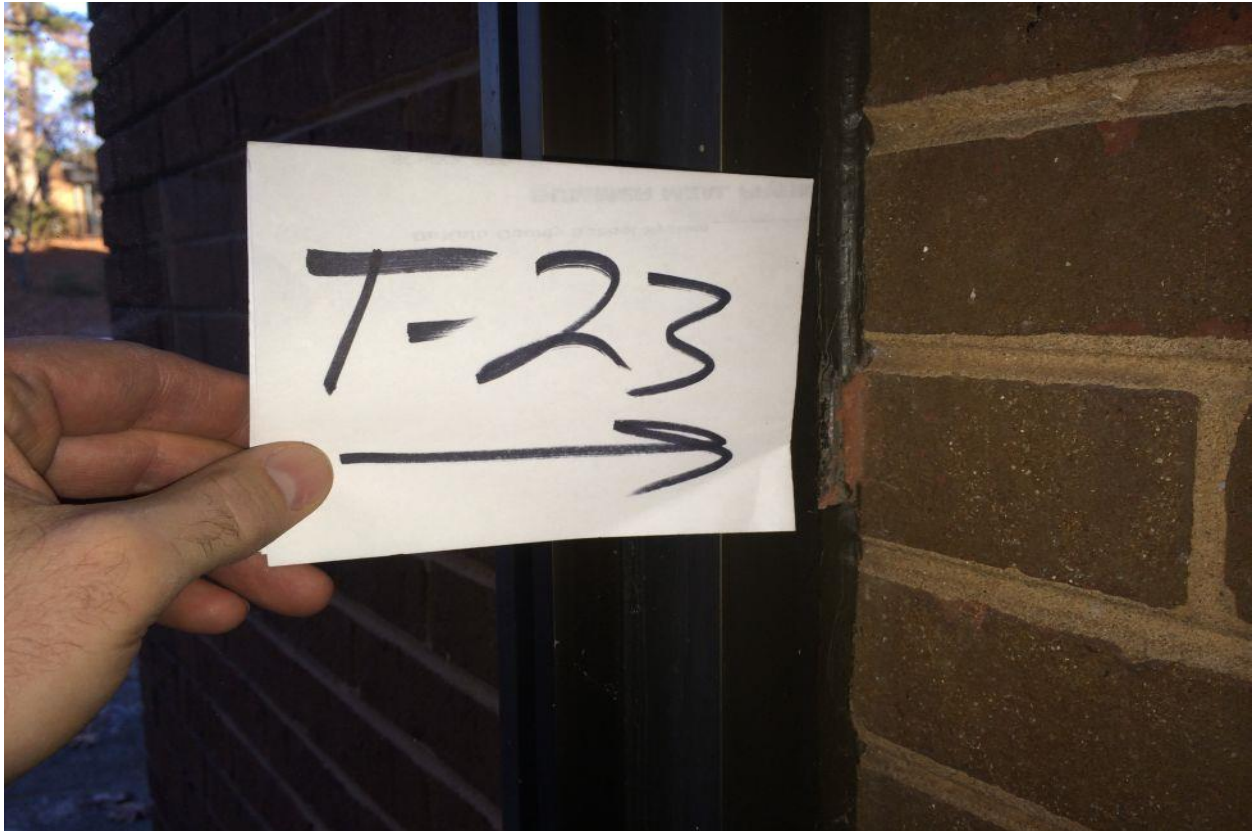


Plate 72: Laboratory analyses did not detect asbestos minerals within the window caulk sample TS-23 collected from the Theatre Building windows.

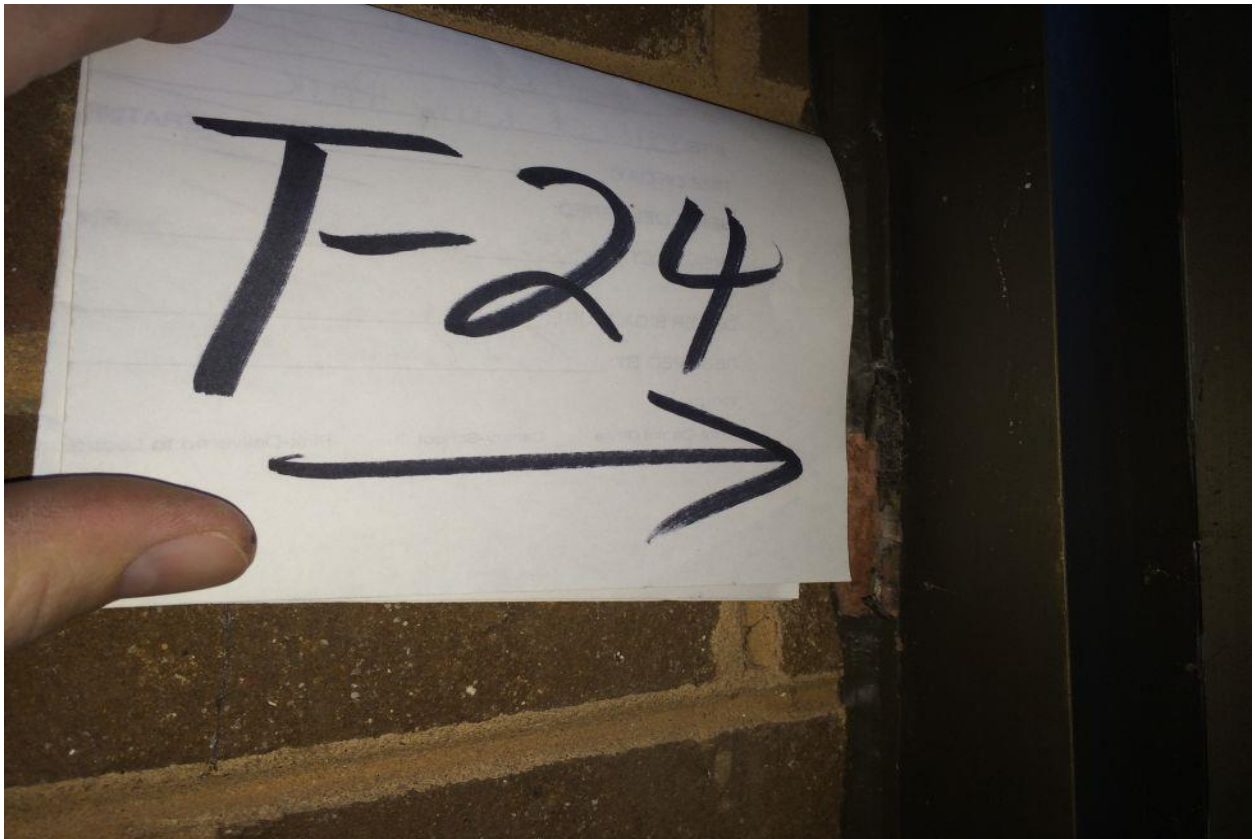


Plate 73: Laboratory analyses did not detect asbestos minerals within the window caulk sample TS-24 collected from the Theatre Building windows.

Appendix 3

Asbestos Analytical Laboratory Report



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

Bulk Sample Summary Report



Lab Code 102082-0

4-Mar-16

Client Name: **Geo-Hydro Engineers, Inc.**AES Job Number: **1603075**Project Name: **BROOKRUN PARK THEATRE**Project Number: **JB 150114.30**

Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
T-01 Layer: 1	1603075-001A	North Side Lobby Entrance Skim Coat Overhang	ND	ND	ND	ND	ND	ND	
T-02 Layer: 1	1603075-002A	North Side Lobby Overhang Transite Tile	20	ND	ND	ND	ND	ND	Paint included as binder
T-03 Layer: 1	1603075-003A	South Side Lobby Entrance Overhang Skim Coat	ND	ND	ND	ND	ND	ND	
T-04 Layer: 1	1603075-004A	South Side Lobby Entrance Overhang Transite Tile	20	ND	ND	ND	ND	ND	Paint included as binder
T-05 Layer: 1	1603075-005A	Auditorium Ceiling Skim Coat	ND	ND	ND	ND	ND	ND	Paint included as binder
T-05 Layer: 2	1603075-005A	Auditorium Ceiling Skim Coat	ND	ND	ND	ND	ND	ND	

Note: CH=chrysotile, AM=amosite, CR=crocidolite, AC=actinolite, TR=tremolite, AN=anthophyllite

For comments on the samples, see the individual analysis sheets.

ND = None Detected

AES, Inc. is accredited by NIST's National Voluntary Laboratory Accreditation Program (NVLAP) for Polarized Light Microscopy (PLM) analysis, Lab Code 102082-0. All analyses performed in accordance with EPA "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (EPA 600/M4-82-020), 1982 as found in 40 CFR, Part 763, Appendix E to Subpart E and "Method for the Determination of Asbestos in Bulk Building Materials" (EPA/600/R-93/116), 1993.

These test results apply only to those samples actually tested, as submitted by the client. All percentages are reported by visually estimated volume.

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials, quantitative TEM is currently the only method that can be used to determine conclusive asbestos content.

This report must not be reproduced except in full without written approval of Analytical Environmental Services, Inc.

Microanalyst:

Elena Ivanova

QC Analyst:

Yelena Khanina



ANALYTICAL ENVIRONMENTAL SERVICES, INC.
Bulk Sample Summary Report



#13.

Lab Code 102082-0

4-Mar-16

Client Name: **Geo-Hydro Engineers, Inc.**

AES Job Number: **1603075**

Project Name: **BROOKRUN PARK THEATRE**

Project Number: **JB 150114.30**

Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
T-06 Layer: 1	1603075-006A	Auditorium Wall / Skim Coat	ND	ND	ND	ND	ND	ND	Paint included as binder
T-06 Layer: 2	1603075-006A	Auditorium Wall / Skim Coat	ND	ND	ND	ND	ND	ND	
T-07 Layer: 1	1603075-007A	Chapel / 12"x12" Ceiling Tile	ND	3	ND	ND	ND	ND	Paint included as binder
T-08 Layer: 1	1603075-008A	Gym / 12"x12" Ceiling Tile	ND	3	ND	ND	ND	ND	Paint included as binder
T-09 Layer: 1	1603075-009A	West Hallway / Skim Coat	ND	ND	ND	ND	ND	ND	Paint included as binder
T-09 Layer: 2	1603075-009A	West Hallway / Skim Coat	ND	ND	ND	ND	ND	ND	

Note: CH=chrysotile, AM=amosite, CR=crocidolite, AC=actinolite, TR=tremolite, AN=anthophyllite

For comments on the samples, see the individual analysis sheets.

ND = None Detected

AES, Inc. is accredited by NIST's National Voluntary Laboratory Accreditation Program (NVLAP) for Polarized Light Microscopy (PLM) analysis, Lab Code 102082-0. All analyses performed in accordance with EPA "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (EPA 600/M4-82-020), 1982 as found in 40 CFR, Part 763, Appendix E to Subpart E and "Method for the Determination of Asbestos in Bulk Building Materials" (EPA/600/R-93/116), 1993.

These test results apply only to those samples actually tested, as submitted by the client. All percentages are reported by visually estimated volume.

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials, quantitative TEM is currently the only method that can be used to determine conclusive asbestos content.

This report must not be reproduced except in full without written approval of Analytical Environmental Services, Inc.

Microanalyst:

Elena Ivanova

QC Analyst:

Yelena Khanina



ANALYTICAL ENVIRONMENTAL SERVICES, INC.
Bulk Sample Summary Report

NVLAP[®]

Lab Code 102082-0

4-Mar-16

Client Name: Geo-Hydro Engineers, Inc.	AES Job Number: 1603075	
Project Name: BROOKRUN PARK THEATRE	Project Number: JB 150114.30	

Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
T-10 Layer: 1	1603075-010A	Auditorium / Glue under Carpet	2	ND	ND	ND	ND	ND	
T-11 Layer: 1	1603075-011A	Chapel / Glue under Carpet	2	ND	ND	ND	ND	ND	

Note: CH=chrysotile, AM=amosite, CR=crocidolite, AC=actinolite, TR=tremolite, AN=anthophyllite

For comments on the samples, see the individual analysis sheets.

ND = None Detected


AES, Inc. is accredited by NIST's National Voluntary Laboratory Accreditation Program (NVLAP) for Polarized Light Microscopy (PLM) analysis, Lab Code 102082-0. All analyses performed in accordance with EPA "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (EPA 600/M4-82-020), 1982 as found in 40 CFR, Part 763, Appendix E to Subpart E and "Method for the Determination of Asbestos in Bulk Building Materials" (EPA/600/R-93/116), 1993.

These test results apply only to those samples actually tested, as submitted by the client. All percentages are reported by visually estimated volume.

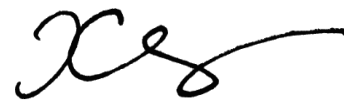
PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials, quantitative TEM is currently the only method that can be used to determine conclusive asbestos content.

This report must not be reproduced except in full without written approval of Analytical Environmental Services, Inc.

Microanalyst:


 Elena Ivanova

QC Analyst:


 Yelena Khanina

**EMSL Analytical, Inc**

2205 Corporate Plaza Parkway SE, Suite 200, Smyrna, GA 30080

Phone/Fax: (770) 956-9150 / (770) 956-9181

<http://www.EMSL.com>atlantalab@emsl.com

EMSL Order: 071307074

CustomerID: GEOH50

CustomerPO:

ProjectID:

Attn: **Jarrett Baggett**
Geo-Hydro Engineers, Inc.
1000 Cobb Place Blvd.
Ste. 290
Kennesaw, GA 30144

Phone: (770) 426-7100
 Fax: (770) 426-5209
 Received: 12/13/13 12:35 PM
 Analysis Date: 12/18/2013
 Collected: 12/12/2013

Project: **Brook Run Park/13057200**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
T-01-Floor Tile 071307074-0001	Black 1x1' Tile Floor	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
T-01-Mastic 071307074-0001A	Black 1x1' Tile Floor	Brown Non-Fibrous Homogeneous		95% Non-fibrous (other)	5% Chrysotile
T-02-Floor Tile 071307074-0002	Black 1x1' Tile Floor	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
T-02-Glue 071307074-0002A	Black 1x1' Tile Floor	Brown Non-Fibrous Homogeneous	2% Cellulose	95% Non-fibrous (other)	3% Chrysotile
T-03-Floor Tile 071307074-0003	White 1x1' Floor Tile	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
T-03-Mastic 071307074-0003A	White 1x1' Floor Tile	Brown Non-Fibrous Homogeneous	<1% Cellulose	98% Non-fibrous (other)	2% Chrysotile
T-04-Floor Tile 071307074-0004	White 1x1' Floor Tile	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
T-04-Mastic 071307074-0004A	White 1x1' Floor Tile	Brown Non-Fibrous Homogeneous	2% Cellulose	96% Non-fibrous (other)	2% Chrysotile

Analyst(s)

Lauren Kerber (16)

Victoria Panariello (15)

Victoria Panariello, Asbestos Lab Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc Smyrna, GA NVLAP Lab Code 101048-1

Initial report from 12/18/2013 11:29:23

**EMSL Analytical, Inc**

2205 Corporate Plaza Parkway SE, Suite 200, Smyrna, GA 30080

Phone/Fax: (770) 956-9150 / (770) 956-9181

<http://www.EMSL.com>atlantalab@emsl.com

EMSL Order: 071307074

CustomerID: GEOH50

CustomerPO:

ProjectID:

#13.

Attn: **Jarrett Baggett**
Geo-Hydro Engineers, Inc.
1000 Cobb Place Blvd.
Ste. 290
Kennesaw, GA 30144

Phone: (770) 426-7100
 Fax: (770) 426-5209
 Received: 12/13/13 12:35 PM
 Analysis Date: 12/18/2013
 Collected: 12/12/2013

Project: **Brook Run Park/13057200**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
T-05 071307074-0005	White 2x2' Ceiling Tile	Gray Non-Fibrous Homogeneous	25% Min. Wool	73% Non-fibrous (other)	2% Amosite
T-06 071307074-0006	White 2x2' Ceiling Tile	Gray Fibrous Homogeneous	25% Min. Wool	73% Non-fibrous (other)	2% Amosite
Inseparable paint / coating layer included in analysis					
T-07-Floor Tile 071307074-0007	Beige 3x3' Floor Tile	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
T-07-Mastic 071307074-0007A	Beige 3x3' Floor Tile	Tan Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
T-08-Floor Tile 071307074-0008	Beige 3x3' Floor Tile	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
T-08-Glue 071307074-0008A	Beige 3x3' Floor Tile	Tan Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
T-09-Tape 071307074-0009	Yellow TSI	Various Fibrous Homogeneous	10% Glass 60% Cellulose	30% Non-fibrous (other)	None Detected
T-09-Insulation 071307074-0009A	Yellow TSI	Yellow Fibrous Homogeneous	90% Min. Wool	10% Non-fibrous (other)	None Detected

Analyst(s)

Lauren Kerber (16)

Victoria Panariello (15)

Victoria Panariello, Asbestos Lab Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc Smyrna, GA NVLAP Lab Code 101048-1

Initial report from 12/18/2013 11:29:23

**EMSL Analytical, Inc**

2205 Corporate Plaza Parkway SE, Suite 200, Smyrna, GA 30080

Phone/Fax: (770) 956-9150 / (770) 956-9181

<http://www.EMSL.com>atlantalab@emsl.com

EMSL Order: 071307074

CustomerID: GEOH50

CustomerPO:

ProjectID:

Attn: **Jarrett Baggett**
Geo-Hydro Engineers, Inc.
1000 Cobb Place Blvd.
Ste. 290
Kennesaw, GA 30144

Phone: (770) 426-7100
 Fax: (770) 426-5209
 Received: 12/13/13 12:35 PM
 Analysis Date: 12/18/2013
 Collected: 12/12/2013

Project: **Brook Run Park/13057200**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos	
			% Fibrous	% Non-Fibrous	% Type	
T-10 071307074-0010	White/Gray Spray On Ceiling	Gray/White Fibrous Homogeneous		80% Non-fibrous (other)	20% Chrysotile	
T-11 071307074-0011	White/Gray Spray On Ceiling	Gray/White Fibrous Homogeneous		80% Non-fibrous (other)	20% Chrysotile	
T-12 071307074-0012	Yellow Chill Water Line TSI	White/Yellow Fibrous Homogeneous	80% Min. Wool 10% Glass	10% Non-fibrous (other)	None Detected	
T-13 071307074-0013	Yellow Boiler Wrap	White/Yellow Fibrous Homogeneous	10% Synthetic 80% Min. Wool	10% Non-fibrous (other)	None Detected	
T-14 071307074-0014	Gray, Spray On Fireproofing	Gray Fibrous Homogeneous		80% Non-fibrous (other)	20% Chrysotile	
T-15 071307074-0015	Gray, Spray On Fireproofing	Gray Fibrous Homogeneous		80% Non-fibrous (other)	20% Chrysotile	
T-16 071307074-0016	Gray, Spray On Fireproofing	Gray Fibrous Homogeneous		80% Non-fibrous (other)	20% Chrysotile	
T-17 071307074-0017	Gray, Spray On Fireproofing	Gray Fibrous Homogeneous		80% Non-fibrous (other)	20% Chrysotile	

Analyst(s)

Lauren Kerber (16)

Victoria Panariello (15)

Victoria Panariello, Asbestos Lab Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc Smyrna, GA NVLAP Lab Code 101048-1

Initial report from 12/18/2013 11:29:23

**EMSL Analytical, Inc**

2205 Corporate Plaza Parkway SE, Suite 200, Smyrna, GA 30080

Phone/Fax: (770) 956-9150 / (770) 956-9181

<http://www.EMSL.com>atlantalab@emsl.com

EMSL Order: 071307074

CustomerID: GEOH50

CustomerPO:

ProjectID:

#13.

Attn: **Jarrett Baggett**
Geo-Hydro Engineers, Inc.
1000 Cobb Place Blvd.
Ste. 290
Kennesaw, GA 30144

Phone: (770) 426-7100
 Fax: (770) 426-5209
 Received: 12/13/13 12:35 PM
 Analysis Date: 12/18/2013
 Collected: 12/12/2013

Project: **Brook Run Park/13057200**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
T-18 071307074-0018	Gray, Spray On Fireproofing	Gray Fibrous Homogeneous		80% Non-fibrous (other)	20% Chrysotile
T-19 071307074-0019	White Plaster Wall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
T-20 071307074-0020	White Plaster Wall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
T-21 071307074-0021	BlackAsphalt Roof	Black Fibrous Heterogeneous	3% Cellulose 10% Glass 5% Synthetic	82% Non-fibrous (other)	None Detected
This is a composite analysis of inseparable roofing layers.					
T-22 071307074-0022	BlackAsphalt Roof	Black Fibrous Heterogeneous	15% Cellulose 10% Glass 5% Synthetic	70% Non-fibrous (other)	None Detected
This is a composite analysis of inseparable roofing layers.					
T-23 071307074-0023	Brown Window Caulk	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
T-24 071307074-0024	Brown Window Caulk	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Lauren Kerber (16)

Victoria Panariello (15)

Victoria Panariello, Asbestos Lab Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc Smyrna, GA NVLAP Lab Code 101048-1

Initial report from 12/18/2013 11:29:23



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

071307074

EMSL ANALYTICAL, INC.
2205 CORPORATE PLAZA PKWY
SUITE 200
SMYRNA, GA 30080
PHONE: (770) 956-9150
FAX: (770) 956-9181

Company: <u>Geo-Hydro Engineers, Inc.</u>		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: <u>1000 Cobb Place Blvd, Suite 240</u>		Third Party Billing requires written authorization from third party	
City: <u>Kennesaw</u>	State/Province: <u>GA</u>	Zip/Postal Code: <u>30144</u>	Country: <u>US</u>
Report To (Name): <u>Jarrett Baggett</u>		Telephone #: <u>770-426-7100 x107</u>	
Email Address: <u>jbaggett@geohydro.com</u>		Fax #: <u>770-426-3209</u>	Purchase Order:
Project Name/Number: <u>Brook Run Park / 13057240</u>		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
U.S. State Samples Taken:		Connecticut Samples: <input type="checkbox"/> Commercial <input type="checkbox"/> Residential	

Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour	<input type="checkbox"/> 6 Hour	<input type="checkbox"/> 24 Hour	<input checked="" type="checkbox"/> 72 Hour
<input type="checkbox"/> 48 Hour	<input type="checkbox"/> 96 Hour	<input type="checkbox"/> 1 Week	<input type="checkbox"/> 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	TEM- Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> TEM Qual. via Filtration Technique <input type="checkbox"/> TEM Qual. via Drop-Mount Technique Other: <input type="checkbox"/>
---	--	---

<input type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group	Filter Pore Size (Air Samples): <input type="checkbox"/> 0.8µm <input type="checkbox"/> 0.45µm
--	--

Samplers Name: <u>Jarrett Baggett</u>	Samplers Signature: <u>[Signature]</u>
---------------------------------------	--

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
T-01	Black 1x1' tile Floor	Bulk	12-12-13/1335
T-02	Black 1x1' tile Floor	Bulk	12-12-13/1336
T-03	White 1x1' Floor tile	Bulk	12-12-13/1338
T-04	White 1x1' Floor tile	Bulk	12-12-13/1340
T-05	White 2x2' ceiling tile	Bulk	12-12-13/1345
T-06	White 2x2' ceiling tile	Bulk	12-12-13/1347
T-07	Beige 3x3' Floor tile	Bulk	12-12-13/1351
T-08	Beige 3x3' Floor tile	Bulk	12-12-13/1355

Client Sample # (s):	Total # of Samples: <u>24</u>
Relinquished (Client): <u>[Signature]</u>	Date: <u>12-13-13</u> Time: <u>1235</u>
Received (Lab): <u>[Signature]</u>	Date: <u>12/13/13</u> Time: <u>1235</u>
Comments/Special Instructions:	



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

071307074

EMSL ANALYTICAL, INC. #13.
2205 CORPORATE PLAZA PKW.,
SUITE 200
SMYRNA, GA 30080
PHONE: (770) 956-9150
FAX: (770) 956-9181

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
T-09	Yellow TSI	Bulk	12-12-13/1405
T-10	White/Gray Spray on Ceiling	Bulk	12-12-13/1425
T-11	White/Gray Spray on Ceiling	Bulk	12-12-13/1430
T-12	Yellow, Chill Water Line TSI	Bulk	12-12-13/1450
T-13	Yellow Boiler Wrap	Bulk	12-12-13/1455
T-14	Gray, Spray on Fireproofing	Bulk	12-12-13/1459
T-15	Gray Spray on Fireproofing	Bulk	12-12-13/1510
T-16	Gray Spray on Fireproofing	Bulk	12-12-13/1515
T-17	Gray Spray on Fireproofing	Bulk	12-12-13/1525
T-18	Gray Spray on Fireproofing	Bulk	12-12-13/1540
T-19	White Plaster Wall	Bulk	12-12-13/1545
T-20	White Plaster Wall	Bulk	12-12-13/1555
T-21	Black Asphalt Roof	Bulk	12-12-13/1605
T-22	Black Asphalt Roof	Bulk	12-12-13/1608
T-23	Brown Window Caulk	Bulk	12-12-13/1615
T-24	Brown Window Caulk	Bulk	12-12-13/1620
*Comments/Special Instructions:			

Appendix 4

Asbestos Inspector Certification

The Environmental Institute

Jarrett Baggett

Social Security Number - XXX-XX-4730

Geo-Hydro Engineers, Inc. - 1000 Cobb Place Blvd., Suite 290 - Kennesaw, Georgia 30144

*Has completed coursework and satisfactorily passed
an examination that meets all criteria required for
EPA/AHERA/ASHARA (TSCA Title II) Approved Reaccreditation*

Asbestos in Buildings: Inspector Refresher

October 20, 2015

Course Date

15229


Certificate Number

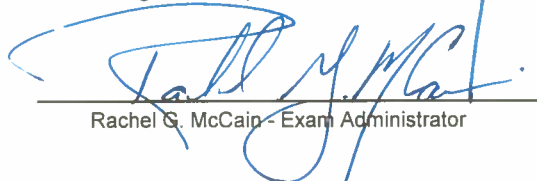
October 20, 2015

Examination Date

October 19, 2016

Expiration Date


David W. Hogue - Principal Instructor / Training Manager


Rachel G. McCain - Exam Administrator

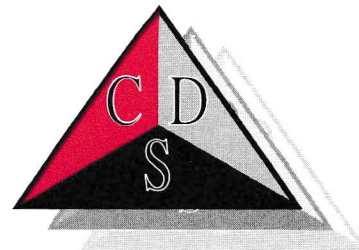


(Approved by the ABIH Certification Maintenance Committee for 1/2 CM point - Approval #11-577)

(Florida Provider Registration Number FL49-0001342 - Course #FL49-0002805)

TEI - 1841 West Oak Parkway, Suite F - Marietta, Georgia 30062 - (770) 427-3600 - www.tei-atl.com

COMPLETE DEMOLITION SERVICES, LLC.



March 9, 2016

City of Dunwoody
41 Perimeter Center East
Suite 250
Dunwoody, Georgia 30346

RE: Theatre Building/4770 North Peachtree Road/Dunwoody

DEMOLIITON/ABATEMENT COST ESTIMATE

Complete Demolition Services, LLC appreciates the opportunity to provide you with this cost estimate for the above mentioned project. Complete Demolition Services, LLC will provide all labor, materials and equipment to complete this project in a timely and professional manner.

SCOPE OF WORK

Demolition and disposal of debris from the theatre building to include slabs, footings, basement excavation, import of compactable fill, all perimeter sidewalks, concrete steps and rear concrete platforms. This also includes erosion control.

TOTAL ESTIMATE: \$200,000.00

ABATEMENT

Approximately 1,300 square feet of 12 inch floor tile.
Approximately 5,000.00 square feet of 24 inch square ceiling tile.
Approximately 2,700 square feet of 12 inch square ceiling tile.
Approximately 650 square feet of ceiling area in projection room.
Approximately 8,000 square feet of glue under carpet.
Approximately 400 square feet of ceiling tile.

TOTAL ASBESTOS ESTIMATE: \$32,200.00

GRAND TOTAL: \$232,200.00

If there is a moisture found under the slab of the theatre building as it was discovered at the last two demolition's on that site expect the cost to remove it \$125,000.00

GRAND TOTAL: \$357,200.00